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A Special Report to
The President and
The Congress

# Shipping, Shipyards and Sealift:

## Issues of National Security and Federal Support 1985

National
Advisory
Committee on
Oceans and
Atmosphere

July 1985

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July 1985

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**NATIONAL ADVISORY COMMITTEE**
**ON**
**OCEANS AND ATMOSPHERE**
3300 Whitehaven Street, N.W.
Washington, DC 20235

To the President and the Members of the Congress:

As Chairman of the National Advisory Committee on Oceans and Atmosphere (NACOA), I am pleased to forward to you a copy of our report, "Shipping, Shipyards and Sealift: Issues of National Security and Federal Support." The conclusions reached and the recommendations made support current trends unlinking shipping from shipbuilding and advance several approaches for strengthening our Nation's sealift capability in the interests of national security.

Respectfully,

John E. Flipse

John E. Flipse
Chairman

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# EXECUTIVE SUMMARY

## Defining the Problem

The Nation's maritime policy, embodied in the Merchant Marine Acts of 1920 and 1936, as amended, has for over half a century provided Federal supports to the maritime industries to preserve in peacetime sufficient capacity to respond to a national defense emergency. It is increasingly clear that our maritime policy, and the package of protections derived from it—tax credits, loan guarantees, ship construction and operating subsidies, limited cargo preference, protected domestic trade (cabotage) and build-U.S. requirements—have had limited success in preserving a viable U.S.-flag fleet and merchant marine. The decline in the shipping and shipbuilding industries despite substantial government supports suggests the need to examine and define the national security requirements for each.

The United States has for some time been the world's largest trading nation with a dramatic increase from 130 million long tons of foreign trade in 1950 to 630 million in 1983. Carriage of foreign trade in U.S.-flag vessels has fallen from over half (by weight) at the end of World War II to less than 6 percent in 1983, but the declining role of U.S. shipping has not impeded the overall growth of the U.S. economy or our foreign trade. Indeed it can be argued that the decline of the high-cost, U.S.-flag fleet, and its supporting shipbuilding base, has had a net beneficial effect on the overall national economy. The economic arguments for Federal support of the maritime industries are thus less than conclusive, and the arguments have focussed increasingly on the national defense needs for U.S. shipping and shipyards.

The primary national requirements for the U.S. maritime industries are the national defense needs, during a conflict, for naval combatant ships to wage war at sea; adequate merchant sealift capacity to project military equipment and supplies overseas and concurrently provide critical shipping to support our economy; and sufficient shipyard capacity to support both. Sealift needs fall into three categories: floating prepositioned storage of supplies; rapid initial overseas deployment of forces, their equipment and supplies (surge sealift); and long-term resupply of overseas forces (sustaining sealift). In addition, shipping assets would be needed for import of critical materials and some ordinary trade and for domestic waterborne transport of critical materials, such as transport of strategic petroleum reserve oil to refineries.

Many experts are concerned that, in time of conflict, the Nation will need many more ships for combat and sealift—and more shipyards to activate, repair and replace them—than present natural economic forces will maintain in peacetime. NACOA has therefore defined the issues, for the purposes of this study on shipbuilding and sealift in the national defense context, as follows:

- What is the most effective and least costly way to ensure that adequate sealift capacity will be available in the timeframe required for a major modern conflict?
- What level of shipbuilding capacity would ensure an adequate base for mobilization and new ship construction and repair in a major conflict?
- To the extent that shipping and shipbuilding capacity is required, what level and type of Federal support are needed or appropriate?

## The Scenario

Until recently, national sealift requirements were based on the scenario of a NATO/Warsaw Pact conflict requiring movement of U.S. troops and supplies across the North Atlantic to Europe. The changing balance of world economic and political forces resulting from the late 1960s discovery of massive oil reserves in the Middle East prompted U.S. military planners to begin focussing more attention on the Indian Ocean and the Southwest Asia region (the Middle East and Persian Gulf area). The current defense planning scenario, established by the Joint Chiefs of Staff, assumes that a major global conflict could begin in Southwest Asia, and spread to Europe, Northeast Asia (especially Korea) and three oceans. It is a worst-case scenario in terms of the requirements it generates—a prolonged (3-year), non-nuclear, global conflict, waged in three theatres, with two major periods of sea battle.

Military strategists conclude that a modern global conflict would have to be fought with Naval and sealift vessels already built during peacetime; NACOA concurs with this conclusion. Unlike the beginnings of World War II, where the United Kingdom held off the aggressor for several years while the United States prepared for war, a modern global conflict would almost

certainly mean immediate U.S. involvement, and the increased distance required for sealift of supplies adds severe time constraints. These considerations have prompted serious reappraisal of the status of, and requirements for, the Nation's sealift assets.

## Maritime Industry Status

The continued decline in both the shipping and shipbuilding industries in this country has raised increasing national defense concerns.

Although the United States has one of the largest shipbuilding industries in the world, devoted almost solely to naval programs at this time, it ranks only 10th among commercial shipbuilding nations worldwide with less than two percent of the world's commercial ship orderbook. Largely because of differences in national standards of living, the world shipbuilding market, as with other heavy industry, is moving generally from the United States and Europe to the Orient, and from developed to developing nations. The U.S. shipbuilding industry has long been unable to compete with foreign yards. Virtually all of the merchant vessels built in U.S. yards in the past decade have been built either with Federal subsidy or for protected domestic trades, but recent changes in Federal maritime support programs and depressed economic conditions have all but halted this commercial ship construction. Three major shipyards have closed since 1982, and General Dynamics Corporation recently announced that its Quincy Shipbuilding Division, a major shipyard that has been in business for 101 years, will close in the spring or summer of 1986.

There are currently only 6 major U.S. shipping lines, carrying container cargo, down from 19 in 1970, and they are heavily dependent on government cargo reserved for U.S. ships. Almost all U.S.-flag bulk vessels operate in the domestic trades that are reserved for U.S. ships. In the domestic trades, however, trucks, railroads, pipelines, and tug/barges are replacing oceangoing, self-propelled cargo vessels. These developments threaten the viability of the domestic fleet, an important source of militarily useful tonnage and trained U.S. crews for meeting sealift demands in a national emergency.

There are currently less than 500 oceangoing vessels greater than 1,000 gross tons in the U.S.-flag fleet, and 105 U.S. shipyards capable of building or repairing vessels of this size. Except for the tremendous World War II peak, the U.S. shipyard employment base has risen fairly steadily over six decades despite the continued decline in the U.S.-flag fleet. Our longstanding national maritime policy appears to have done a better job of preserving our shipyard base than our U.S.-flag fleet.

## Defense Requirements for Ships

The primary national defense requirement for the U.S. shipping and shipbuilding industries, beyond the peacetime carriage of government cargos and peacetime building and repair of military vessels, is to provide increased sealift and Naval combatant capacity in case of national emergency. Sealift requirements would be similar for a global conflict and for a major U.S. action in Southwest Asia, because lift requirements for other areas would be provided by our allies. Sealift and shipyard requirements to support a major deployment to Southwest Asia have thus received great attention in recent years.

Since 1981, the Department of Defense has completed a comprehensive series of studies quantifying requirements for: prepositioning of supplies, airlift and sealift, delivery of liquid products, shipping needs at home during a global conflict, shipyard capacity for early mobilization (e.g., activating reserve ships) and shipyard capacity for wartime shipbuilding. These studies are all classified either "Secret" or "For Official Use Only;" NACOA has reviewed the entire series.

The 1981 "Congressionally Mandated Mobility Study" (CMMS) concludes that the United States requires an additional airlift capacity of about 20 million ton-miles per day, and recommends that this be supplemented by additional prepositioned supplies and more and faster sealift. The "DOD Sealift Study," completed in March 1984, concludes that the sealift capacity necessary to meet dry-bulk lift requirements for Southwest Asia is about 4.6 million deadweight tons of shipping capacity during the initial surge and about 3.3 million deadwight tons for sustaining resupply. Every militarily useful U.S.-flag private cargo vessel would be needed for sealift in a major overseas deployment, and projections of the future size of the fleet indicate a growing shortfall in U.S.-flag, dry-bulk sealift tonnage. Most of the U.S.-owned vessels under foreign flag are not now considered militarily useful. A companion study, called the "DOD Sealift Tanker Study," now nearing completion, will document a shortfall in militarily useful wet-bulk tonnage for sealift under U.S. ownership (U.S. and foreign flag).

The "Economic Security Shipping Study," recently completed by the Maritime Administration, addresses the shipping requirements for import and domestic transport of critical materials during wartime. The study concludes that there is no shortfall in container or breakbulk ship capacity, because most scheduled general cargo is nonessential in wartime. No shortfall in dry-bulk capacity is expected, since most critical bulk materials are required in small enough quantities to be taken from strategic stockpiles or imported by air. A shortfall is projected, however, in tanker capacity for domestic carriage of refined petroleum prod-

ucts, because the U.S.-flag tanker fleet would be required to support U.S. forces overseas.

Responding to the rapid decline of the U.S.-flag fleet, and increased readiness requirements imposed by the long-distance sealift routes in the new scenario, the Navy is rapidly improving the Nation's sealift capacity. More than $1 billion a year for 5 years is planned for strategic sealift expenditures, more each year than was spent during all the years since World War II combined. The shortfall in dry cargo sealift is being addressed by increases in government-owned sealift vessels and increased funding for modifying commercial cargo vessels. The shortfall in wet-bulk sealift will probably be addressed by purchase of tankers for the Ready Reserve Force and further examination of alternatives such as foreign petroleum supply. The only projected shortfall in domestic shipping needs during a conflict is in tanker capacity for domestic petroleum carriage, but this could be alleviated by allowing foreign tank vessels (owned by U.S. citizens) to enter the protected Jones Act trade during a conflict. The cumulative effect of these approaches is greatly enhanced sealift capacity that is substantially more "ready."

## Defense Requirements for Shipyards

The U.S. shipbuilding base must have sufficient "surge capacity" during early mobilization to activate the reserve combatant and sealift vessels and to convert active merchant vessels for sealift, and must expand quickly for battle damage repair of merchant and combatant ships and for new construction to replace vessels lost during a prolonged conflict.

Two joint studies by the Department of Defense and the Maritime Administration examine the shipyard capacity requirements. The "Shipyard Mobilization Base Study" (SYMBA) reviews the adequacy of the October 1982 shipbuilding base for a 3-year global conflict. The "National Defense Shipyard Study" (NADES) examines the adequacy, for the early mobilization stage of a conflict, of a much smaller shipyard base that is expected to survive the current decline and remain available in 1988-1990. The SYMBA Study concludes that an absolute minimum of facilities needed for the first year of conflict is 51 building positions, 41 graving docks and 56 floating drydocks; that shipyard facilities existing in October 1982 were more than adequate for a major mobilization; and that there might be temporary shortfalls in the number of skilled shipyard workers during early mobilization and later during wartime ship construction. The NADES Study uses different, and NACOA believes more realistic, assumptions about early mobilization and reflects the increased sealift readiness now planned by the Department of Defense. The NADES Study found that early mobilization would require initial availibility of 142,000 skilled shipyard workers, peaking to 157,000 in the eighth month. The Department of the Navy concludes that peacetime employment, even in the smaller shipyard base projected for 1990, would be roughly adequate for early mobilization and facilities would be more than adequate for mobilization tasks.

An independent NACOA survey of shipyard surge capacity in the major defense contract yards suggests they are currently operating at only about half their full peacetime capacity in workers and steel fabrication, and only about a third of their capacity to finish new vessels. Our estimate of their wartime maximum capacity suggests a possible increase in ship production of 4 to 6 times greater than in today's underutilized shipbuilding base, without expansion of facilities.

Surge requirements for U.S. shipyards for a major mobilization have been lowered through several government initiatives: by increasing the amount of prepositioned military supplies, thus reducing the number of sealift ships needed; by building and converting a number of vessels under government control for sealift; by increasing the readiness of our reserve fleets, and thus reducing the shipyard work needed for activation; by relying more on conversion of existing commercial vessels than on wartime newbuilding of sealift vessels; and by planning more pre-mobilization work on commercial vessels in the active U.S.-flag fleet. NACOA concurs with the Department of Defense that a substantially reduced private U.S. shipbuilding base would be adequate to meet early mobilization needs required by the present scenario.

## Alternatives

The range of solutions offered by public and private interests for solving the Nation's sealift problems fall into three broad categories:

- Preserving excess shipbuilding capacity through increased support for U.S. shipyards in peacetime, so that warships and sealift vessels can be activated, repaired and built during a major conflict.
- Increasing the government-controlled merchant fleet to have immediate and direct control of needed sealift assets during a major mobilization.
- Increasing the number and military readiness of privately owned sealift assets through measures to aid U.S. ship operators.

Our positions on several major proposals are as follows. We oppose a Federal shipbuilding program for new merchant vessels to be chartered or laid up in reserve fleets. We oppose a cargo preference scheme that would reserve a percentage of commercial cargos in U.S. foreign trade to U.S.-flag, U.S.-built vessels. We oppose a federally supported "Maritime Redevelopment Bank," that would use Federal funds to encourage financing for ship construction. We oppose any increased Federal supports to the U.S. shipbuilding industry, because the industry has overcapacity for the commercial market it serves, and the present

shipyard base is substantially in excess of the capacity needed for defense mobilization. We support more concerted efforts to increase the military usefulness of private merchant vessels and to increase the shipping tonnage in the active commercial U.S.-flag fleet. We favor increased use of private vessels as sealift assets rather than preserving excess shipbuilding capacity or increasing government control of sealift assets.

For the most part, NACOA opposes the range of proposals initiated largely in the Congress to preserve excess shipbuilding capacity; opposes further growth in the government-controlled active and reserve sealift fleets without fully exploring other alternatives; and supports a range of proposals from various sources, including our own deliberations, to increase the number and military usefulness of private vessels under U.S. control.

## Conclusions and Recommendations

NACOA concludes the following:

- Sealift requirements for the initial stages of a modern major conflict depend more on the sufficiency of existing U.S.-controlled shipping and trained U.S. crews than on shipbuilding capacity. National efforts should therefore emphasize developing a viable Federal and commercial sealift fleet in peacetime.
- The United States now has a very large shipbuilding capacity, and the yards expected to survive the current decline will still have sufficient surge capacity to satisfy wartime needs as defined by current defense scenarios.
- Requirements to build in U.S. shipyards have impaired the competitiveness of U.S. operators of oceangoing, self-propelled cargo vessels, have contributed to the decline in the U.S.-flag fleet, and have failed in recent years to create substantial commercial work in U.S. shipyards.
- Most recent proposals to aid the U.S. shipbuilding industry—such as a federally funded merchant shipbuilding program, renewed construction subsidies, a federally backed maritime bank, and expanded cargo preference—are too small in scope to be of significant impact or would create larger problems.

NACOA recommends the following:

1. OPPOSITION TO PROPOSALS FOR A FEDERAL SHIPBUILDING PROGRAM FOR COMMERCIAL SEALIFT VESSELS—OR ANY OTHER PROGRAM REQUIRING MAJOR FEDERAL FUNDING—DESIGNED TO PRESERVE THE PRESENT EXCESS CAPACITY IN THE SHIPBUILDING BASE.

NACOA believes that all additional surge capacit required for mobilization currently exists within th yards doing Navy peacetime construction, and Nav and commercial repair work, and that this work wi preserve an "irreducible minimum" shipbuilding bas that will be adequate in future mobilization. This small shipbuilding base might initially be inadequate fo wartime construction, but shipyard expansion woul begin immediately and would continue as neede throughout the conflict. The Department of Defens studies allow virtually no geographic movement o skilled shipyard workers during mobilization, and w believe this is an unrealistic constraint. The majo constraint on expansion of wartime shipbuilding woul not be shipyard capacity, but delayed availability o major components, e.g., propulsion plants for Nav and merchant vessels, and complex weapons system for combatant vessels; increases or decreases in th shipbuilding base would not affect this problem.

2. DECREASED DEPENDENCE ON A GOVERN MENT-OWNED AND MAINTAINED READY RE SERVE FORCE, AND REDUCED SIZE AN INCREASED READINESS OF THE RESERV SEALIFT FLEETS.

NACOA supports the approach of adapting moder active commercial vessels to military purposes, be cause maintenance costs are borne by the operator trade, the vessel provides training for U.S. crew, an the ship would have a ready crew if it were called u for service. In the long run, we believe this is a mo efficient and less costly alternative than Federal buildin acquiring or serving of an outmoded reserve fleet.

3. CONTINUED EMPHASIS ON METHODS O ADAPTING COMMERCIALLY EFFICIENT VE SELS FOR MILITARY PURPOSES.

Continued research is needed to develop co effective ways of adapting modern commercial ve sels to military sealift needs. In addition, funding shou be provided to do such conversion and activati work on U.S.-flag commercial ships during peacetime enhance their readiness, reduce the shipyard conv sion time required at mobilization, decrease the sh yard base required and decrease the need for expand government-controlled sealift fleets.

4. INCREASED EMPHASIS ON ENSURING TI AVAILABILITY, TRAINING AND READINESS U.S. CREWS NEEDED FOR MOBILIZATION RESERVE AND FOREIGN-FLAG SEALIFT VE SELS.

Requirements for increased numbers of ready cre are being generated by the expanding size of t Ready Reserve Force, and increased reliance U.S.-owned, foreign-flagged vessels. In addition, greater readiness requirements for sealift vess require better training and more rapid availability crews to staff them.

5. CONTINUED UNLINKING OF NATIONAL SHIPPING AND SHIPBUILDING POLICIES BY ELIMINATING ALL REQUIREMENTS FOR U.S.-FLAG OPERATORS RECEIVING GOVERNMENT SUPPORTS TO BUILD VESSELS IN U.S. SHIPYARDS.

Specifically, we recommend that operators be allowed to use foreign-built vessels in the U.S. foreign trades and still be eligible for Capital Construction Fund tax deferral, Title XI Federal Ship Loan Guarantees, immediate access to government-impelled cargos and operating subsidy, preferably a new form of operating incentives we propose. (See recommendation #6.)

We believe the half century of requirements to build new vessels in high-cost U.S. shipyards has increased the capital and operating costs of the U.S. shipping industry; has discouraged modernization and expansion of the U.S.-flag fleet; and has contributed to the long-term decline of domestic and foreign waterborne trading opportunities for the U.S. fleet. We support permanent authority for U.S. shipowners to operate foreign-built vessels in the foreign trades while receiving Federal supports, to improve the competitive position, and thus the size and sealift capacity, of the U.S.-flag fleet.

6. AMENDMENT OF CURRENT MARITIME STATUTES THAT IMPAIR THE COMPETITIVENESS OF U.S. VESSELS IN FOREIGN TRADE.

Specifically, we recommend establishment of a new form of operating incentives linked to reductions in crew size and related operating costs; amendment of shipboard manning laws and regulations that prevent reductions in U.S. vessel crew size; and exemption of oceangoing cargo ships from paying duty on foreign shipyard repairs. Federal supports must be designed to encourage decreases in U.S. operating costs. Crew size and other operating costs must be reduced if the U.S. fleet is to become competitive in the world market and grow to provide increased sealift assets under private control.

7. INCREASED EMPHASIS ON INCENTIVES TO ATTRACT FOREIGN-REGISTERED VESSELS—UNDER U.S. OR FOREIGN OWNERSHIP—TO THE U.S. FLAG.

We propose a number of measures to encourage reflagging to the U.S. registry of vessels now under foreign registry. Even a small-scale reflagging would be desirable from a national defense standpoint, because these ships would provide work and training for U.S. crews, would be available for pre-mobilization installation of Sealift Enhancement Features, and would thus increase the sealift readiness of the U.S.-flag fleet.

8. AMENDMENT OF THE JONES ACT TO ALLOW SOME FOREIGN BUILDING OF NEW COMMERCIAL CARGO SHIPS FOR THE JONES ACT DOMESTIC TRADE.

We recommend a 10-year "coproduction" period, requiring building in U.S. shipyards in order to earn transferable credits for building in foreign yards. We suggest that these provisions be applicable only to large, oceangoing self-propelled, cargo-carrying ships that are capable of contributing to the Nation's sealift needs in case of a national emergency. This approach might stimulate a limited increase in commercial shipbuilding orders in U.S. yards, without Federal funding, and would expand and modernize the U.S.-flag, sealift capable cargo fleet.

# Introduction

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# INTRODUCTION

In its January 1983 report, "Marine Transportation in the United States: Constraints and Opportunities," the National Advisory Committee on Oceans and Atmosphere (NACOA) presented a number of findings and recommendations concerning the U.S. shipbuilding industry. NACOA found that:

> *Congress and the Administration have continuously stressed that a U.S.-flag marine transportation system, with its supporting industrial base, is essential to our Nation's national security in peace and in times of emergency. Given this policy, NACOA concludes that the present levels of U.S.-flag participation in our trade and the supporting shipbuilding base are critically below that required to meet U.S. needs.*

The Committee recommended prompt aid to U.S. shipyards and suggested government-backed low financing to attract foreign orders to U.S. yards, tax incentives for the yards to invest in productivity improvements, and government-assisted worker training programs. The report recommended that tax advantages for U.S. ship operators should continue to apply only for U.S.-built vessels and should not be expanded to encourage U.S. owners to build new vessels in foreign shipyards.

Of the many areas addressed in the 1983 NACOA report, the U.S. shipbuilding base appeared to have the most critical and immediate problems. A number of shipyards were reported to be facing imminent closure, and NACOA believed the situation was serious enough to warrant a follow-on study focussing on the problems of the shipbuilding industry and the possible national security implications. This study was begun in May of 1983.

For half a century, since passage of the Merchant Marine Act of 1936, the major justification for Federal supports for the shipping and shipbuilding industries has been their national defense utility. Consequently, we have reviewed the present Department of Defense (DOD) conflict scenario, mobilization plans, sealift needs and wartime economic shipping needs, available and projected sealift assets, ship activation requirements, wartime ship construction and repair needs, the consequent shipyard mobilization base required, and projections of decline in the shipyard base. The major classified documents on these subjects were made available to NACOA for review, and the Committee held three classified sessions with officials of the intelligence community, the Department of Defense and the Maritime Administration. We also have considered the substantial recent changes in the Defense Department's assets for and approach to sealift and mobilization. At the same time, we considered numerous proposals designed to improve the Nation's sealift assets or to preserve its shipbuilding base or both. Based upon this expanded review, we have reaffirmed some conclusions from our earlier report on marine transportation, but we also have changed some of our previous recommendations.

## Understanding the Scenario

Because of our Nation's geographic location—flanked by oceans on two sides and by the Gulf of Mexico to the south—virtually all of our allies are "overseas." This, coupled with a "forward" defense strategy based on keeping a conflict as far away as possible from our own borders, requires overseas projection of forces and their support by airlift and sealift.

Until recently, national sealift requirements were based on the scenario of a North Atlantic Treaty Organization (NATO)/Warsaw Pact conflict requiring movement of U.S. troops and supplies across the North Atlantic Ocean to Europe. No shortfalls in sealift capacity were foreseen for this scenario for several reasons despite a shrinking U.S.-flag fleet. Many troops and supplies are positioned in Europe. NATO allies have committed 400 merchant vessels to support a U.S. deployment in Europe. U.S.-owned, foreign-flagged vessels are considered to be available, and most (80 percent) carry NATO-nation officers and are largely crewed by foreign nationals from countries that have strong defense relationships with the United States—the Republic of South Korea, the Philippines and Taiwan (Yourch, 1985). Airlift, not sealift, had received primary attention and funding.

During the mid-1960s, the Soviet Union began to change its overall strategy from one of developing and defending its continental territory to one of aggressively extending its economic, political and military presence worldwide (Office of the Chief of Naval Operations, 1985). The discovery of massive oil resources in the Middle East in the late 1960s, and its

consequent effects on the balance of economic and political forces in the region and the world, prompted U.S. military planners to begin focussing more attention on the Indian Ocean and the Southwest Asia region.*

For several years, the U.S. Secretary of Defense, the Joint Chiefs of Staff and the military services have cooperated in studies called Strategic Mobility Requirements and Program (SMRP). The fiscal year 1982 SMRP focussed on the airlift and sealift requirements of a worldwide conflict centered in Europe between NATO and Warsaw Pact nations. SMRP-83 added an analysis of lift requirements for a unilateral U.S. military action in Southwest Asia. The Secretary of Defense directed that SMRP-84 planning be based on the possibility of a worldwide conflict centered in Southwest Asia as well as in the NATO/Warsaw Pact region (Office of the Chief of Naval Operations, 1985).

The Department of Defense quickly realized there would be difficulties responding to a military emergency in Southwest Asia: the distance for projection of forces is great; NATO support would not necessarily be forthcoming for limited U.S. actions; there are few defensible locations for land-based prepositioned supplies; and poor local infrastructure (ports, airstrips, roads) would require sealift of even more equipment for improvements. A Rapid Deployment Force (RDF) was established in 1981 in case of a crisis in this region, and its deployment needs focussed increased attention on the limits of available sealift. For a deployment to Southwest Asia, 95 percent of the supporting equipment and 99 percent of the fuel would go by sea. Yet, as late as fiscal year 1983, 97 percent of the mobility funding went to airlift and only 3 percent to sealift—almost a reverse proportion to the amount of lift each would be required to accomplish in a major mobilization of this kind (Congressional Budget Office, 1984).

What has emerged is a significantly changed approach to defense planning for a major conflict, with a new planning scenario established by the Joint Chiefs of Staff. It is a worst-case scenario in terms of the requirements it generates—a prolonged (3-year), non-nuclear, global conflict, waged in three theatres, with two major periods of sea battle. Continued emphasis is being placed on the requirements for an action in Southwest Asia, because lift requirements in the other two theatres are expected to be largely provided by our allies (U.S. Department of Defense, 1984). Because of this assumption, sealift requirements would be similar for a global conflict and for a unilateral major U.S. involvement in Southwest Asia.

* "Southwest Asia" is a geographic descriptor recently adopted by the Department of Defense to describe the Middle East and Persian Gulf area.

A series of recently completed defense plann studies have addressed requirements for this sc scenario; requirements have been quantified for troo equipment and supplies, airlift, sealift and shipy capacity. The studies dealing with sealift needs discussed in Chapter 2 of this report, and th addressing requirements for a shipyard mobiliza base—both for early mobilization and for a prolon conflict—are examined in Chapter 3.

## Defining the Problem

Since the founding of our Nation, the United St has, to some degree, protected our shipping and s building industries from foreign competition. An 1 cabotage act reserved U.S. coastwise trade to vessels. Cabotage is generally understood as the t or transport of merchandise by sea between two p within the same country; it has also come to mean practice of restricting such trade to ships regist within that country. Unlike many other maritime nat the United States requires that vessels in the ca tage trade be not only registered, but built, in country. The Merchant Marine Act of 1920, comm known as the "Jones Act," reaffirmed this dom trade reservation and has since remained basi unchanged. The pre-World War II Roosevelt Ad istration and the 1936 Merchant Marine Act stre national defense arguments for protecting our mar industries. During the five decades since, our nat maritime policy has continued to support a st U.S. fleet—U.S.-owned, built, manned and repa These requirements for U.S. ownership, constru in U.S. shipyards, and U.S. crews apply not on vessels in our inland waterways and coastwise "J Act" trade but also to operation and constru subsidies established in the 1936 Merchant M Act for U.S. vessels in foreign trade, and for almo subsequent loan guarantees and tax benefits have been legislated for the maritime industries. U.S. ship operators and shipyards have long linked, and the rationale for supporting both has l been based on national security needs.

U.S. commercial ship construction costs become two to three times higher than those rep in foreign yards and delivery times considerably er. Questions have been raised in recent years whether the many requirements to build in U.S. yards may not be imposing an unnecessary or burden on the already ailing U.S. shipping indus requiring U.S. shipowners, in effect, to suppor shipyards for the national interest.

The decline of both industries—despite subs government subsidy, protection, tax advantage other supports—suggests the need to examin define the national security requirements for

National security in this context is often understood to include two aspects. The first involves the overall economic health of the Nation, including such indicators as volume of foreign trade, trade deficit, gross national product, and the like. The second encompasses the Nation's defense needs; in the case of the maritime industries, these include shipping assets to carry military equipment and supplies overseas and to carry wartime imports of critical materials, and a shipbuilding base to activate and replace the sealift shipping, and to repair and build warships, as needed during a conflict.

In examining the economic impact of the shipbuilding industry, we find that the U.S. private shipbuilding and ship repair industry employs about 170,000, with gross industry revenues annually of about $11 billion, representing less than 0.2 percent of the Nation's labor force, and in 1982 accounting for about 0.25 percent of the Nation's gross national product.* For comparison, the shipbuilding employment level represents about 70 percent as many workers as the motor vehicles industry and about 15 percent of the revenues of that industry (U.S. Department of Commerce, 1982). The U.S. shipping and shipbuilding industries are both capital and labor intensive, and largely unable to compete with lower foreign wage rates and major government supports provided in other shipbuilding nations. Import and export costs for U.S. business as a whole have been lowered through lower foreign-flag shipping costs. U.S. foreign trade has grown steadily and impressively since World War II, and the United States is now the major trading nation in the world. At the same time, however, there has been a precipitous decline in the percentage of this trade carried in U.S. vessels. Indeed, it can be argued that the decline of the high cost U.S.-flag fleet, and its supporting shipbuilding base, has had a net beneficial effect on the overall national economy. The economic arguments for Federal support of the maritime industries are thus less than conclusive, and the arguments have focussed increasingly on the national defense needs for U.S. shipping and shipyards.

The major national defense role for U.S. merchant ships is to provide national sealift capacity. With 40 of our 42 allies (Holloway, 1983) and about one-fourth of our land combat troops overseas (Tarpgaard, 1984), sealift capacity is an essential part of U.S. defense readiness. U.S. merchant vessels would be needed in a major or minor conflict to deliver military equipment and supplies overseas and to ensure the continuing import of critical materials to U.S. ports. These sealift vessels must be "in being," that is, already constructed before mobilization. And the U.S. shipbuilding base must have sufficient "surge capacity" to activate and convert available ships very quickly at the onset of a conflict—both reserve naval ships and reserve and commercial merchant ships for sealift. The shipbuilding base also must be sufficient to expand quickly enough to handle battle damage repair to merchant and combatant ships and to begin new construction to replace vessels lost during a prolonged conflict.

Many experts believe the Nation will need, in time of conflict, more ships for sealift and more shipyards to activate, repair and replace them than present natural economic forces will maintain in peacetime. Consequent proposals for Federal supports to the maritime industries abound. Because the national defense argument is so frequently used—but often not defined or quantified by those who use it—NACOA sought to review carefully the national defense needs for sealift and shipyard mobilization base.

NACOA has thus defined the issues, for the purposes of this study on shipbuilding and sealift in the national defense context, as follows:

- What is the most effective and least costly way to ensure that adequate sealift capacity will be available in the timeframe required for a major modern conflict?
- What level of shipbuilding capacity would ensure an adequate base for mobilization and new ship construction and repair in a major conflict?
- To the extent that shipping and shipbuilding capacity is required, what level and type of Federal support are needed or appropriate?

* This employment figure excludes 78,500 workers in the Nation's nine public shipyards owned by the Navy and the Coast Guard; within the private sector it includes all workers employed in shipbuilding-related fields, including unskilled and administrative workers within the shipyards and also including related work such as ship design, consulting, etc. As such it is an economic indicator and not strictly representative of the emergency shipbuilding capacity available for a major conflict.

# Chapter 1
# Industry Review: Status and Problems in Shipping and Shipbuilding


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# CHAPTER 1
# Industry Review: Status and Problems in Shipping and Shipbuilding

The U.S. shipping and shipbuilding industries have long been considered essential national defense assets, and this was statutorily recognized in the Merchant Marine Acts of 1920 and 1936. Pertinent language of the 1936 Merchant Act (101) is still the "law of the land":

> *It is necessary for the national defense and the development of its foreign and domestic commerce that the United States shall have a merchant marine (a) sufficient to carry its domestic water-borne commerce and a substantial portion of the water-borne export and import foreign commerce of the United States and to provide shipping service essential for maintaining the flow of such domestic and foreign waterborne commerce at all times, (b) capable of serving as a naval and military auxiliary in times of war or national emergency, (c) owned and operated under the U.S. flag by citizens of the United States insofar as may be practicable, (d) composed of the best-equipped, safest, and most suitable types of vessels, constructed in the United States and manned with a trained and efficient citizen personnel, and (e) supplemented by efficient facilities for shipbuilding and ship repair. It is hereby declared to be the policy of the United States to foster the development and encourage the maintenance of such a merchant marine.*

The shipping and shipbuilding industries nationally and globally have a cyclical history, with shipping responding to the economics of world trade, and with shipbuilding historically responding to economic, and especially wartime, shipping needs. A worldwide recession and consequent slump in shipping and shipbuilding are already forcing a contraction of both industries in this country. With the emergence of many developing nations that are expanding their maritime efforts, the long-term projections of the U.S. maritime industries are bleak. Because the U.S. shipping and shipbuilding industries are national defense assets, their status and problems are of national concern. A brief overview of the U.S. maritime industries is presented in this chapter.

## Worldwide Overcapacity—Shipping and Shipbuilding

A slackened world economy has thrown global merchant shipping into a serious recession. A prime factor in this decline is the decreased demand for oil, which comprised about one-half of world seaborne trade in 1980 (Office of Technology Assessment, 1983). About 15 percent of world merchant ship tonnage (95 million deadweight tons) was idle or laid up in 1984 (*Lloyd's Shipping Economist*, 1985), and a massive overcapacity in world shipbuilding has resulted. Although declines in the cycle of world economy and shipping demand are not unusual, the economic upturn of recent months has not significantly impacted this overcapacity, as the world fleet readjusts to the burst of ship construction in the early 1970s. Many shipping experts agree that a modest expansion of world trade will improve the shipping markets slightly within the next 5 years (P. Loree, 1984; E. Naess, 1985; J. Goldstein, 1985); however, it appears that no matter how much world trade increases in the next few years, ample ship capacity will exist to handle it, and no significant increase in shipbuilding demand is likely in the near term.

According to Lloyd's Register of Shipping, the worldwide commercial shipbuilding orderbook in September 1984 comprised 31 million gross tons, down 75 percent compared to 1974 (U.S. Naval Sea Systems Command, 1985). For years, established shipbuilding nations, including the United States, have provided substantial government support to keep their shipyards open for political, social and national security reasons. Support has taken varied forms, such as shipbuilding subsidies, export credits, tax deferrals or other financing incentives, and, in some countries, government ownership of the shipyards. The lack of demand for new ships, however, has increased the cost of supporting shipyards and left many governments reluctant to provide more financial aid. Several nations have attempted to "rationalize" their industries—i.e., reduce the shipbuilding capacity to a reasonable level given the greatly reduced demand. In Japan, the world's leading merchant shipbuilding

nation with more than 40 percent of the world's commercial ship construction orders in 1984, the government has developed and directed a program to close selected shipyards and retain workers for related industries. Both the Swedish and British governments nationalized their shipyards in 1977 to concentrate shipbuilding activity in a few core yards. This approach did rationalize the industry in Great Britain, and the government has recently decided to move the yards back to the private sector. In many nations, including the United States, such rationalization is occurring through natural economic forces, with depressed markets causing the closure of several shipyards.

World shipbuilding capacity has not declined, however, because many developing nations—aided by lower wage rates, weak currencies and strong government support—are expanding their shipbuilding industries. The Republic of Korea received 20 percent of merchant shipbuilding orders in 1984, up from 10 percent in 1982, which poses a serious challenge to Japanese leadership in the industry. Other emerging shipbuilding nations include the Peoples Republic of China (PRC), Taiwan and Brazil. Together, Taiwan and the PRC held almost 6 percent of world orders, and ranked 4th and 9th respectively in 1984 merchant newbuilding orders. (See Table 1.) Despite its financial problems, Brazil ranked 3rd in merchant shipbuilding, with almost 5 percent of world orders. The United States ranks 10th among commercial shipbuilding nations with less than 2 percent of the world orderbook (Maritime Administration, 1985a).

**Table 1.—World Merchant Shipbuilding.**

**Vessels on Order or Under Construction (as of April 1, 1985).**

| Rank | Nation | Tonnage | Percentage of world orders |
|---|---|---|---|
| | | *Millions of deadweight tons* | |
| 1 | Japan | 20.3 | 43.5 |
| 2 | Republic of Korea | 9.2 | 19.7 |
| 3 | Brazil | 2.2 | 4.7 |
| 4 | Taiwan | 1.5 | 3.3 |
| 5 | Romania | 1.5 | 3.2 |
| 6 | Spain | 1.2 | 2.6 |
| 7 | Poland | 1.2 | 2.5 |
| 8 | Yugoslavia | 1.2 | 2.5 |
| 9 | Peoples Republic of China | 1.0 | 2.2 |
| 10 | United States[1] | 0.8 | 1.7 |
| Other | | 6.5 | 14.1 |
| | **Total World** | **46.6** | **100.0** |

[1] Privately owned.

Source: Maritime Administration. 1985. Maritime Industry Key Statistics (Summer 1985). U.S. Department of Transportation, Washington, D.C., 2 p.

All of the above factors have resulted in severe competition for new ship orders, with highly favorable, government-backed financing packages offered by several nations to attract shipowners. The Japanese and Koreans are aggressively pursuing those few orders available by substantially cutting their prices. Against this backdrop, the U.S. International Trade Commission recently completed a Congressionally mandated investigation of the competitive position of the U.S. commercial shipbuilding and ship repair industries (investigation #332-197 under Section 332 of the Tariff Act of 1930), and the final Commission report was released in April 1985. It concludes that: foreign shipbuilders have a competitive advantage over the U.S. industry because of the cost of raw and semi-finished materials, the availability and cost of capital, and the wage rates; the U.S. shipbuilding industry is competitive in labor skills, technology and product quality; and foreign shipping and shipbuilding enjoy a competitive advantage in the area of government assistance (U.S. International Trade Commission, 1985).

## Federal Support Programs for U.S. Maritime Industries

The United States has long provided protection and support to its maritime industries, as have many other nations. Federal supports for shipowners have included direct subsidies, protected markets, tax incentives and loan guarantees. The various forms of Federal support are explained in detail in many other publications, so we list them only briefly here:

- **Operating Differential Subsidy (ODS).**
  Merchant Marine Act of 1936, Title VI, as amended (46 U.S.C. §1171-1185). Direct subsidy to ship operators to defray the higher cost of U.S. shipping operations; only for U.S. vessels engaged in foreign trade. To receive subsidy, vessels must be built in U.S. shipyards, except for a one-year exemption in fiscal year 1982 (October 1, 1981-September 30, 1982) that allowed foreign building.
- **Construction Differential Subsidy (CDS).**
  Merchant Marine Act of 1936, Title V, as amended (46 U.S.C. §1151-1161). Direct subsidy to shipowners to defray the higher costs (up to 50 percent) of U.S. shipyard construction; only for vessels engaged in foreign trade. A vessel built with CDS funds may, however, be granted permission by the Maritime Administration to enter the domestic trades for up to six months of any year with prorated payback of the subsidy; permanent authority to enter the domestic trades can, under certain circumstances, also be granted .
- **Capital Construction Fund (CCF).**
  Merchant Marine Act of 1936, as amended (46 U.S.C. §1177). Defferal of taxes on up to 100

percent of shipping income placed in a fund to be used for new ship construction. New vessels must be built of reconstructed in U.S. shipyards; only for foreign trade, Great Lakes and non-coastwise U.S. trade.

- **Ship Financing Guarantee Program (Title XI).**
  Merchant Marine Act of 1936, Title XI, as amended (46 U.S.C. §1271-1279c). Government-backed loan guarantees for construction, reconstruction or reconditioning of vessels for any U.S.-flag trade. Although the law does not so specify, the Maritime Administration in regulation and practice has required that vessels be built in U.S. shipyards.

- **Cargo Reservation (Government-impelled cargos).**
  Merchant Marine Act of 1936, §901, as amended (46 U.S.C. §1241); Cargo Preference Act of 1954. Military cargos are wholly reserved to U.S.-flag vessels. Other Federal agency cargos are 50 percent reserved to U.S. vessels. (See generally, 46 U.S.C. §1241 *et seq.*) Vessels not built in U.S. yards must wait 3 years for eligibility to carry government-impelled cargos.

- **Cabotage (Jones Act).**
  Merchant Marine Act of 1920, as amended (46 U.S.C. §861 *et seq.*) All domestic trade between two points in the United States is reserved for U.S.-flag vessels (with U.S. crew) that must also be built in U.S. shipyards.*

In addition to aiding the U.S. shipowner, most of these Federal supports were designed to aid domestic seagoing labor and shipyards by requiring the U.S.-flag operator to use 100 percent U.S. crew and to build his vessels in U.S. shipyards. At the same time, most of the Federal supports were necessary specifically to assist the U.S. ship operator in overcoming higher U.S. labor and shipyard costs. Table 2 summarizes the maritime support programs and the requirements imposed for receiving them; Table 3 presents past Federal outlays for direct subsidies.

Although U.S.-flag registry does not require a vessel to be built in a U.S. ship yard, almost all of the maritime support programs do.

Termination of most of these programs has been proposed, partly because the U.S. fleet and shipyard base are declining despite Federal aids, and partly because of the current Administration's general policies on Federal support programs. CDS is still authorized under the Merchant Marine Act but has not been funded since the fiscal year (FY) 1981 appropriation of $135 million. Existing ODS contracts must be honored, but no funding for new agreements has been

* "U.S. shipyards," for the purposes of the U.S. cabotage law, comprise all private shipyards in the United States and all of its protectorates, possessions and territories, except for the Trust Territories.

**Table 2.—Requirements for Maritime Supports.**

| Support | U.S.-flag | U.S.-owned[1] | U.S. crew | U.S.-built | Trade Domestic | Trade Foreign | Trade Liner | Trade Bulk | Subsidized[2]/ Subsidized | Subsidized[2]/ Nonsubsidized |
|---|---|---|---|---|---|---|---|---|---|---|
| Operating Differential Subsidy (ODS) | Yes | Yes | Yes | Yes | No | Yes | Yes (1936)[3] | Yes (1970)[4] | —— | —— |
| Construction Differential Subsidy (CDS)[5] | Yes | Yes | Yes | Yes | No | Yes | Yes (1936) | Yes (1970) | —— | —— |
| Capital Construction Fund (CCF) | Yes | Yes | Yes | Yes | No[6] | Yes | Yes | Yes | Yes (1970) | Yes (1970) |
| Title XI Federal Ship Financing Fund | Yes | Yes | Yes | Yes[7] | Yes | Yes | Yes | Yes | Yes | Yes |
| Government-cargo preference | Yes | Yes | Yes | No[8] | No | Yes | Yes | Yes | —— | —— |
| Cabotage (Jones Act) | Yes | Yes | Yes | Yes | Yes | No | —— | —— | No | Yes |

[1] The Merchant Marine Act of 1936, as amended, requires greater than 50 percent U.S.-citizen ownership of U.S. shipping companies.
[2] Subsidy refers to Operating Differential Subsidy and Construction Differential Subsidy.
[3] Established in the Merchant Marine Act of 1936.
[4] Established in the Merchant Marine Act of 1970.
[5] CDS still authorized but unfunded since fiscal year 1981.
[6] CCF construction allowed for Great Lakes and non-contiguous domestic routes but not for coastwise domestic trade.
[7] Not law but has been required by the Maritime Administration's regulations and practice.
[8] Foreign-built vessels may carry government-impelled cargos but must wait 3 years after reflagging to become eligible.

Source: National Advisory Committee on Oceans and Atmosphere. 1985. Washington, D.C.

**Table 3.—Maritime Subsidy Outlays.**

| Fiscal Year | Construction Differential Subsidy[1] | Operating Differential Subsidy | Total |
|---|---|---|---|
| | *Millions of dollars* | | |
| 1985 | 0 | 344.2 | 344.2 |
| 1984 | 0 | 401.8 | 401.8 |
| 1983 | 3.8 | 339.7 | 343.5 |
| 1982 | 184.5 | 400.7 | 585.2 |
| 1981 | 208.1 | 334.9 | 543.0 |
| 1936-1980 | 3,522.3 | 6,224.7 | 9,747.0 |

[1] Includes subsidy for construction and reconstruction.

Sources: Maritime Administration.
1984a. The Annual Report of the Maritime Administration for Fiscal Year 1982. U.S. Department of Transportation, Washington, D.C., 65 p.
1984b. The Annual Report of the Maritime Administration for Fiscal Year 1983. U.S. Department of Transportation, Washington, D.C., 65 p.
1985. Maritime Industry Key Statistics (Summer 1985). U.S. Department of Transportation, Washington, D.C., 2 p.
National Advisory Committee on Oceans and Atmosphere. 1984. Staff Budget Review. Washington, D.C., 58 p.

made available, and it is the Administration's policy not to offer any new ODS con tracts. In addition, the terms of existing ODS agreements may be changing. There was a one-year waiver in FY 1982 of the U.S.-built requirement for operators receiving ODS. During that year, the Maritime Administration granted authorization for 36 new ships and 14 conversions, and $1.4 billion in ship construction, reconstruction and acquisition orders were placed overseas.* The Administration has proposed that trade route restrictions and limitations on foreign-flag affiliations be eased for operators receiving ODS, but this liberalizing of the ODS requirements is being contested by the major non-subsidized operator.

Title XI loan guarantees currently total $7.2 billion, but the Maritime Administration committed less than $200 million in new loan guarantees in FY 1984 because of depressed economic conditions, high construction costs and overtonnaging. In recent years, the number of defaults on Title XI-backed obligations has increased markedly because of the serious economic downturn of the shipping and fishing industries. Consequently, the revolving fund obligated to cover Title XI defaults is no longer solvent and is currently borrowing about $125 million from the general Treasury at market rates. This year the Maritime Administration proposed an increase in Title XI loan fees—a 5-percent upfront fee and a flat 1-percent annual loan guarantee charge—which would make the program too expensive for many shipowners.

The President's 1985 tax simplification proposal would eliminate the CCF tax deferral program and the investment tax credit and accelerated depreciation rates that are used by the capital-intensive shipping industry. In the early days of the 99th Congress, the Administration also offered legislative proposals to limit the scope of U.S-flag cargo preference for government-impelled cargos. Among the Administration's proposals to limit, or do away with, most of the Federal supports to the shipping or shipbuilding industries, no Administration proposals are included that would terminate or change the protections of the Jones Act for U.S. domestic trade.

## U.S. Shipping

### Domestic Trade

The domestic trade includes routes that are coastwise, intercoastal Pacific/Atlantic/Gulf) and noncontiguous (continental United States to other States and territories). The Jones Act fleet consists mostly of relatively old dry cargo vessels, new tankers built in the late 1970s for the Alaskan oil trade and a growing fleet of offshore tugs and barges. Table 4 summarizes the percentage of domestic intercity freight that is waterborne and the type of vessel used.

Of the total U.S. intercity freight moved in 1983, 20 percent was carried by domestic waterborne vessels (including oceangoing ships and waterways barges), with 27 percent moving by rail, 36 percent by truck and 17 percent by pipeline (less than 1 percent of domestic cargo, by weight, is airfreight). Of the waterborne trade, 33 percent was oceangoing, 9 percent Great Lakes and 58 percent inland waterways. Comparison with 1965 figures shows that little has changed in almost two decades: rail has lost slightly to waterborne and pipeline carriage; and domestic ocean trade has gained somewhat over Great Lakes but has lost no appreciable trade to inland waterways (Maritime Administration, 1984b). What has changed is the type of vessel used, and the cargo carried, in the domestic fleet. The percentage of domestic waterborne commerce (by weight) carried by tankers has remained about the same since 1965, but use of tank barges has increased substantially. Almost 90 percent of the domestic cargo moved by ships is carried in tankers and tank barges. Dry cargo carriage in both ships and barges declined by about half since 1965 to the point

* The Omnibus Budget Reconciliation Act of 1981 (codified at 46 U.S.C. §1185) allowed the Secretary of Transportation to authorize ship operators in the U.S. foreign trades receiving Operating Differential Subsidy to order ships built or converted in foreign shipyards for one year (FY 1982). A total of 36 new vessels and 14 conversions were authorized; of these, contracts have been placed in foreign shipyards for 28 new vessels and 11 conversions. The Act would have extended this build-foreign authority for a second year if the President had requested at least $100 million for Construction Differential Subsidy or an equivalent new program. The Administration's FY 1983 budget contained no such proposals, so the build-foreign authority was not extended.

**Table 4A.—Domestic Intercity Cargo Carriage, by Mode.**

| Mode | 1965 | 1983 |
|---|---|---|
| | *Percentage of total cargo weight annually* | |
| Waterborne | 18 | 20 |
| Rail | 33 | 27 |
| Truck | 36 | 36 |
| Pipeline | 13 | 17 |

**Table 4B.—Domestic Waterborne Trade, by Geographic Area.**

| Geographic Area | 1965 | 1983 |
|---|---|---|
| | *Percentage of total cargo weight annually* | |
| Domestic oceangoing | 25 | 33 |
| Great Lakes | 19 | 9 |
| Inland waterways | 56 | 58 |

**Table 4C.—Domestic Oceangoing Cargo Carriage, by Type of Vessel.[1]**

| Vessel Type | 1965 | 1983 |
|---|---|---|
| | *Percentage of total cargo weight annually* | |
| Dry cargo ship | 11 | 3 |
| Dry cargo barge | 11 | 7 |
| Tanker ship | 73 | 71 |
| Tank barge | 5 | 18 |

[1] Table 4C presents type of vessels carrying only the oceangoing portion of U.S. domestic trade; Great Lakes and inland waterways trade are not included here.

Derived from: Christie, Robert. 1984. Personal communication. Division Chief, Domestic Ocean Shipping, Maritime Administration, Washington, D.C.
Maritime Administration. 1985. Domestic Waterborne Trade of the United States 1979-1983. U.S. Department of Transportation, Washington, D.C., Draft.

that only 10 percent of domestic waterborne commerce now represents dry cargo (Maritime Administration, 1984b). This means that, except for the increased petroleum trade, ships have lost considerable cargo carriage to railway and highway modes. With roughly half of the active U.S.-flag fleet in the domestic oceangoing Jones Act trades, there has been a consequent effect on national sealift capability. Trucks, railroads, pipelines and tugs/barges are replacing oceangoing, self-propelled cargo vessels, which are necessary to carry military equipment and supplies overseas during a conflict.

Not only is the build-U.S. requirement inhibiting replacement of the aging Jones Act fleet, maintenance costs for the older vessels are rising. One way to supplement or modernize the domestic fleet is to waive the 1936 Merchant Marine Act's exclusion of vessels built with Construction Differential Subsidy (CDS) from operating in the domestic trades. The 1936 Act (§506) does provide for CDS vessel entry into the Jones Act trade for 6 months of any year (with prorated payback of subsidy). In addition, recent regulations of the Maritime Administration provide that a CDS tanker vessel may enter the domestic trades on a permanent basis if the Construction Differential Subsidy, including interest, is paid back in full by June 6, 1986 (50 F.R. 19170, May 7, 1985). Although several temporary waivers have been granted to allow vessels built using CDS funds to serve the Alaskan oil trade, permanent waivers have met with strong opposition from non-subsidized Jones Act operators. The Construction Differential Subsidy was designed to reduce shipbuilding costs for the U.S. operator who must compete with low-cost foreign ships in the foreign trades. A legislative proposal to allow full payback of the subsidy in return for permanent entry into the Jones Act domestic trades is currently in the hearing stage, and the issue is far from resolved.

High U.S. seagoing crew costs also affect the cargo rates of goods shipped in the domestic oceangoing trade. To avoid the higher costs of transportation in Jones Act vessels, shippers have looked to foreign sources of raw materials formerly acquired in this country (Leback and McConnell, 1983). In shifting to other transport modes, and to importing rather than domestic transporting of raw materials, shippers are making basic supply, manufacturing and distribution decisions that may permanently affect the domestic waterborne fleet's ability to compete effectively. These developments threaten the viability of the Jones Act fleet, an important source of militarily useful tonnage and trained U.S. crews for meeting sealift demands in a national emergency.

## Foreign Trade

Despite our present trade deficit, the United States is the largest trading nation (imports and exports) in the world. By weight, the overwhelming majority travels in ships, but even in value, over half of the trade is waterborne. In 1983, however, U.S.-flag vessels carried only 16.2 percent by value, and less than 6 percent by weight, of the U.S. oceanborne foreign trade (Congressional Budget Office, 1984). U.S.-flag carriage of imports and exports has decreased steadily since the end of World War II, when the U.S. fleet was the largest in the world and carried over half (by weight) of our foreign trade. Since then, our merchant fleet has declined drastically. The U.S. merchant fleet after the war totalled more than 5,000 vessels, most of them government-owned. Sales, lay-ups and scrapping after the war reduced the number of active U.S.-flag cargo

vessels to slightly more than 600 by 1950 (Office of the Chief of Naval Operations, 1985). Because of the addition of oil tankers, the U.S. merchant fleet increased to almost 1,000 ships in 1973, but has since declined steadily to only 517 ships at the end of 1984. The number of U.S.-flag "liner" operators (those with ships carrying general cargo on regularly scheduled runs) has declined from 19 in 1970 to only 6 in 1985 (May, 1985).

The declining role of U.S. shipping has not, however, impeded the overall growth of the U.S. economy or our foreign trade. In the past 35 years, U.S. foreign trade has increased dramatically from about 130 million long tons per year in 1950 to 630 million long tons in 1983 (Maritime Administration, 1984d). While the liner trades are governed by conference rates so that U.S. vessel shipping rates are comparable to foreign rates, the highly competitive, unregulated bulk trades have largely forced the more expensive U.S. vessels out of the market. In fact, lower shipping rates from foreign bulk vessels with substantially lower operating costs arguably have helped the general U.S. economy by providing lowered costs for imports and exports.

Other major changes have occurred in the foreign shipping trades over the half century since the Merchant Marine Act of 1936. In the 1930s, about 80 percent of global shipping was liner trade (regular, scheduled cargo or passenger runs). There was very little bulk shipping—oil was carried in drums and grain was carried in bags in conventional breakbulk ships—and the United States imported neither oil nor iron ore. With our post-World War II economic growth, our foreign trade began its steady growth, and the United States began importing Venezuelan oil. World bulk shipping grew steadily, with bulk grain, ores and petroleum carried in colliers and tankers, and developed into a highly competitive "tramp" trade characterized by unscheduled, single-voyage or short-term contracts. Today, only about 20 percent of world shipping tonnage is in the liner trades, and 80 percent is bulk (Loree, 1984). The United States has fared better in the liner trades. With such revolutionary U.S. developments as containerized and roll-on/roll-off cargos, we have maintained a 25-percent share of our liner foreign trade. In the bulk trades, where operating costs directly affect individual voyage shipping rates, the United States carries less than 2 percent of its foreign trade (Maritime Administration, 1985b). U.S. owners tend to register liner vessels under U.S. flag to qualify for subsidies and government-cargo preference, but they generally register bulk vessels under foreign flag to lower their capital and operating costs (Congressional Budget Office, 1984).

Shipbuilding prices are generally reported to be 2 to 3 times as high in U.S. yards as in those of the Orient, particularly the Republic of Korea. Up to 80 percent of the cost differential between U.S. and foreign shipping operations has been attributed to U.S. shipbuilding costs (Loree, 1983). High U.S. crew costs also hamper the U.S.-flag operator. Crew costs on U.S. vessels are reported to be 2.5 times as high as those of Great Britain, 6 times the Republic of Singapore (Congressional Budget Office, 1983), 3 times those of Italian crews, 4 times Spanish and 5 times Taiwanese (Loree, 1983). U.S. crew costs have not been competitive since at least 1936 when the Operating Differential Subsidy was established. In fact, decades of subsidy that paid the differential between U.S. and foreign costs, without strictly enforcing limits on U.S. costs, have exacerbated the problem and caused ever-increasing subsidies. To avoid the disappearance of their national fleets, officials of government, seagoing labor and maritime management in several northern European nations and in Japan began cooperating in the late 1960s. They forged agreements on major decreases in vessel crew size to bring operating costs down to competitive levels (National Research Council, 1984b). Fifteen years later, the United States may finally be moving in the same direction. Because of our national standard of living, there will always be a limit to U.S. competitiveness with crew costs of developing nations in international trade. The U.S. unions have, however, made considerable progress toward bringing crew wages and vacations, and overall crew sizes, down to levels comparable with other developed maritime nations. A third major problem faced by U.S. ship operators in the past was taxation. To attract their fleets, open registry nations, such as Liberia and Panama, offered great tax advantages over home registry in the major maritime nations. While shipping was good, and ship operating profits high, the tax advantages of foreign registry were considerable.

Many U.S. owners moved their vessels to foreign registry to escape the triad of problems under U.S.-flag (construction costs, labor costs and taxation) that hampered their competitiveness in foreign trades. Because the United States had a great surplus of vessels after World War II, and because U.S. operators in the foreign trades were in financial distress, the Federal Government allowed—and for a while encouraged—a great deal of this "flagging out" (Carlisle, 1981).

Faced with this host of problems and the attractive alternatives under foreign registry, the U.S.-flag fleet—in both domestic and foreign trades—continues to decline in numbers. Table 5 shows the U.S.-flag fleet, listed according to trade; Table 6 lists the fleet according to vessel type; and Table 7 shows its ranking in the world merchant fleet. Note that the U.S.-flag fleet declined by 25 ships in the 6 months time difference shown on Table 6.

**Table 5.—U.S.-Flag Oceangoing Vessels.**
**By Trade (as of September 30, 1984).**

| Trade | Number of Ships | Cargo Tonnage |
|---|---|---|
| | | *Millions of deadweight tons* |
| Foreign trade | 160 | 4.908 |
| Domestic trade | 183 | 10.900 |
| Government charter | 65 | 1.401 |
| Temporarily inactive | 9 | 1.006 |
| Laidup (privately owned) | 91 | 3.667 |
| **Total Commercial** | **508** | **21.882** |
| National Defense Reserve Fleet | 228 | 2.527 |
| **Total U.S.-Flag** | **749** | **24.409** |

Source: Maritime Administration. 1985. The Annual Report of the Maritime Administration for Fiscal Year 1984. U.S. Department of Transportation, Washington, D.C., 63 p.

## U.S. Shipbuilding

The Commerce Department's recently released "U.S. Industrial Outlook 1985" projected a 4-percent decline in 1985 in the work output of the U.S. shipbuilding industry, despite a modest recovery in shipbuilding worldwide. According to the report, American shipyard product output, including construction and repair, totalled $11.3 billion in 1984, with $400 million of that for non-maritime projects. The report also projected an increase in employment in the major yards by 1989, based upon projected Navy work and a modest rebirth of commercial new-building for a growing coastwise passenger trade. The Shipbuilders Council of America believes the projection is "tremendously optimistic," and expects employment in the major shipyards to decrease 8 to 9 percent in 1985 (Dupin, 1985). A recently released study by the Georgetown Center for Strategic and International Studies (Ullman and Pettavino, 1984) projects a 35-percent decrease in both U.S. shipping and shipbuilding industries by 1989 if current government policies continue—a decline from 536 to 350 U.S.-flag vessels and a similar decline in the number of shipyard workers.

The return on investment in U.S. shipbuilding has been reported as one of the lowest of any major American industry (Heine, 1980). At least one specialist in the maritime industries (Kaitz, 1980) contends that the U.S. shipbuilding industry as a whole made virtually no profit during the 1970s, and many of the major yards would probably not have survived without large conglomerate parents that funded major shipyard facility improvements and offset shipbuilding losses and cash flow deficiencies in return for the depreciation tax benefits from their shipyards. The trend to growing conglomerate ownership, mostly since about 1960, is shown in Table 8.

The Shipbuilders Council of America believes the U.S. industry cannot expect ever to be internationally competitive with Asian shipbuilding nations (Rice, 1985a, 1985c). U.S. commercial shipbuilding prices are 2 to 3 times those for comparable vessels built in the Orient, particularly in the Republic of Korea and newbuilding delivery times in the United States are twice as long as those of foreign yards for comparable

**Table 6.—U.S.-Flag Oceangoing, Privately Owned Vessels.**
**By Type (as of July 1, 1984 and January 1, 1985).**

| Vessel Type | July 1, 1984 | | January 1, 1985 | |
|---|---|---|---|---|
| | Number of Ships | Cargo Tonnage | Number of Ships | Cargo Tonnage |
| | | *Millions of deadweight tons* | | *Millions of deadweight tons* |
| Breakbulk | 85 | 1.180 | 67 | 0.957 |
| Dry bulk | 24 | 1.050 | 19 | 0.983 |
| Intermodal[1] | 143 | 3.094 | 149 | 3.339 |
| Tanker | 232 | 14.370 | 218 | 13.963 |
| Combination | 6 | 0.049 | 6 | 0.049 |
| Tug/barge, oceangoing | 14 | 0.518 | 20 | 0.712 |
| Liquified Natural Gas | 13 | 0.936 | 13 | 0.936 |
| **Total commercial** | **517** | **21.205** | **492** | **20.939** |

[1] Containership or roll-on/roll-off vessel where cargo is easily transferred to other transportation modes such as truck or rail.

Sources: Maritime Administration.
1984. Maritime Industry Key Statistics (Fall 1984). U.S. Department of Transportation, Washington, D.C., 2 p.
1985. Maritime Industry Key Statistics (Summer 1985). U.S. Department of Transportation, Washington, D.C., 2 p.

ships (Congressional Budget Office, 1984; National Research Council, 1984a). U.S. ship repair costs are also higher in U.S. yards. Wages for U.S. shipyard workers are not unreasonable by American standards, with a highly skilled laborer earning roughly $10/hour, or between $23,000 and $28,000 per annum. Mainly because of differences in national standards of living, the world shipbuilding market—as with other heavy industry—is moving generally from the United States and Europe to the Orient, and from developed to developing nations.

According to the Bureau of Labor Statistics (1984), more than 600 private shipbuilding-related facilities are operating in the United States. Most of these are small facilities with less than 100 workers; many are "topside shops" that have no waterside facilities but have mobile workforces that lease pier space to do minor repair or conversion work. Some are design, consulting or policymaking groups with no production facilities. In addition, there are 9 public shipyards (8 Navy-owned and 1 Coast Guard-owned) that currently employ about 78,000 workers (U.S. Naval Sea Systems Command, 1985). (See Table 9.)

**Table 7.—World Merchant Fleet.**

**Ships in Operation (as of October 1, 1984).**

| World Ranking | Registry | Tonnage | Percentage of World |
|---|---|---|---|
| | | *Millions of deadweight tons* | |
| 1 | Liberia | 121.8 | 19.0 |
| 2 | Panama | 61.2 | 9.5 |
| 3 | Greece | 61.2 | 9.5 |
| 4 | Japan | 58.1 | 9.0 |
| 5 | Norway | 28.0 | 4.4 |
| 6 | United Kingdom | 24.7 | 3.8 |
| 7 | United States[1] | 21.2 | 3.3 |
| 8 | U.S.S.R. | 21.0 | 3.3 |
| 9 | France | 14.5 | 2.3 |
| 10 | Italy | 14.4 | 2.2 |
| Other | | 216.3 | 33.7 |
| | **World Total** | **642.4** | **100.0** |

[1] Privately owned.

Sources: Maritime Administration. 1985. Maritime Industry Key Statistics (Summer 1985). U.S. Department of Transportation, Washington, D.C., 2 p.
(All data, except for those pertaining to the United States, were provided to the Maritime Administration by the Naval Intelligence Support Center.)

## The Major Yards

Various sources define "major" shipyards differently: (See Table 10.)

- **Maritime Administration. "Major" Shipbuilding Yards.**

  The Maritime Administration defines a major private shipyard as one that is "opened" and has at least one shipbuilding position—either an inclined shipway, a side-launching platform or a building basin (graving dock)—large enough for a

**Table 8.—Ownership of Selected Major Private Shipyards.**

| Shipyard | Ownership | Date of Conglomerate Ownership |
|---|---|---|
| Avondale Shipyards, Inc. | Avondale Corporation[1] | NA[2] |
| Bath Iron Works Corporation | Congoleum Corporation | 1975 |
| Bay Shipbuilding Corporation | Manitowoc Company | 1968 |
| Sparrows Point Yard | Bethlehem Steel Corporation | pre-World War II |
| Beaumont Yard | Bethlehem Steel Corporation | pre-World War II |
| Electric Boat Division | General Dynamics Corporation | 1952[3] |
| Quincy Shipbuilding Division | General Dynamics Corporation | 1964 |
| Ingalls Shipbuilding Division | Litton Systems, Inc. | 1961 |
| Lockheed Shipbuilding Company | Lockheed Corporation | 1959 |
| National Steel and Shipbuilding Company | Morisson-Knudsen Company, Inc. | 1959 |
| Newport News Shipbuilding | Tenneco, Inc. | 1968 |
| New Orleans Division | Todd Shipyards Corporation | NA[2] |
| Galveston Division | Todd Shipyards Corporation | NA[2] |
| San Francisco Division | Todd Shipyards Corporation | NA[2] |
| Los Angeles Division | Todd Shipyards Corporation | NA[2] |
| Seattle Division | Todd Shipyards Corporation | NA[2] |

[1] Avondale Shipyards, Inc. was owned by the Ogden Corporation from 1958 to 1985, and has been "spun off" from Ogden using excess pension funds in an employee stock ownership plan.

[2] Non-Conglomerate ownership.

[3] Electric Boat was the founding division of General Dynamics Corporation; the parent corporation was founded in 1952.

Source: Personal communications with shipyard representatives from each company listed in this table. 1985.

**Table 9.—U.S. Public Shipyards.**[1,2]

| East Coast | West Coast |
|---|---|
| Portsmouth, New Hampshire | Long Beach, California |
| Philadelphia, Pennsylvania | Mare Island, California |
| Norfolk, Virginia | Puget Sound, Washington |
| Charleston, South Carolina | Pearl Harbor, Hawaii |
| Curtis Bay, Maryland | |

[1] All Navy-owned except Curtis Bay, which is Coast Guard-owned.

[2] In addition to those listed above, the U.S. Navy also owns two shipyards that are wholly or partially leased to private contractors: Puerto Rico Drydock and Marine Terminals, Inc., San Juan, Puerto Rico; and Triple "A" Shipyard, San Francisco, California. Although these are listed as private yards, the facilities could be reclaimed immediately by the Navy in case of major conflict or national emergency. Navy ship repair capability also includes three active overseas U.S. Naval Ship Repair Facilities (in Guam, Subic Bay and Yokusuka, Japan) and numerous mobile floating repair facilities known as Submarine Tenders, Destroyer Tenders and General Repair Ships.

Derived from: Sonenshein, Nathan. (Admiral, USN Ret.) 1985. Personal communication. Member, National Advisory Committee on Oceans and Atmosphere, Washington, D.C.
U.S. Naval Sea Systems Command. 1985. Status of Shipbuilding and Ship Repair Industry of the United States. The 1984 Annual Report of the Coordinator of Shipbuilding, Conversion and Repair. Department of Defense, Washington, D.C., p. 6.

vessel at least 475 foot length by 68 foot beam with 12 foot draft (Maritime Administration, 1984f). Currently, 29 privately owned shipyards are considered major yards.

- **Maritime Administration. Active Shipbuilding Base.**

  The Active Shipbuilding Base is defined by the Maritime Administration as those yards that are "currently opened and engaged in or seeking contracts for the construction of naval ships and/or major oceangoing or Great Lakes merchant ships 1,000 gross tons and over" (Maritime Administration, 1984f). Currently, 23 private shipyards are in the Active Shipbuilding Base. One additional yard (Levingston) is closed on a "care and maintenance" basis, but is still seeking contracts.

- **U.S. Department of the Navy/Maritime Administration. Shipyard Mobilization Base (SYMBA) Study.**

  The Shipyard Mobilization Base includes all shipyards with a minimum 12-foot channel draft that are capable of building, drydocking or topside (pierside) repair of any vessel at least 400 foot length. Major shipyards, according to the SYMBA Study, are defined differently from the Maritime Administration's "major" shipyards: those capable of building or repairing in a dry environment (ways, drydock, graving dock) a vessel of at least 400 foot length (U.S. Department of the Navy/Maritime Administration, 1984). As of October 1982, when the shipyard base for the SYMBA study was originally defined, 110 private yards were included in the SYMBA list of which 71 were considered major yards. Twenty of the 110 SYMBA yards had closed by June 1985 (Table 11); three of them (Maryland Shipbuilding and Drydock, Savannah and Levingston) were considered "major" shipyards in the Shipyard Mobilization Base (Pross, 1984; Karlson, 1985).

- **U.S. Department of the Navy/Maritime Administration. A National Defense Shipyard (NADES) Study.**

  The National Defense Shipyard (NADES) Study uses the most capable and most strategically located 66 yards from the October 1984 mobilization base yards defined in the SYMBA Study. The lower NADES number was chosen based on declining industry trends, projected shipyard work for late 1988 and historical requirements for shipyards in major port areas. The NADES Study defines major yards differently from the SYMBA Study; NADES "major" yards for construction or repair are defined as those able to build or haul a 475 by 68 foot ship. Of the 66 shipyards in the NADES Study base, 9 are public yards, and 57 are private; 29 of the private yards are considered "major" (U.S. Department of the Navy/Maritime Administration, draft).

## The Minor Yards

In addition to the major yards, about 350 small-and medium-sized yards are in the shipbuilding and ship repair business, represented by the American Waterways Shipyard Conference. Of the coastal yards in this group, few have drydocking capability larger than 300 to 350 foot vessel length, and in the inland yards, 100-foot drydock capacity is the norm (Kinter, 1985). A survey by the American Waterways Shipyard Conference shows that 25 of these yards closed between October 1983 and October 1984. Most of the closures were on the Gulf Coast, near the mouth of the Mississippi River, and reflect the downturn in both the offshore supply business for the oil industry and a recession in the inland waterways barge business. The inland barge industry is severely overtonnaged, and some of this is due to government supports. Title XI loan guarantees providing easy financing, coupled with investment tax credits and accelerated depreciation allowances, made barge building an attractive tax shelter that drew much investment from non-shipping interests. Other reasons for the overtonnaging were the grain embargo with the Soviet Union, the collapse of the expected U.S. coal export market, and the general worldwide recession (Kinter, 1985).

**Table 10.—Major U.S. Shipyards and the U.S. Active Shipbuilding Base (as of October 1, 1984).**

| Shipyard | Location | Major[1] | Active[2] |
|---|---|---|---|
| **East Coast** | | | |
| Bath Iron Works Corporation | Bath, Maine | X | X |
| Sparrows Point Yard | Sparrows Point, Maryland | X | X |
| Coastal Drydock & Repair Corporation | Brooklyn, New York | X | No |
| Electric Boat Division | Groton, Connecticut | X | X |
| Quincy Shipbuilding Division | Quincy, Massachusetts | X | X |
| Maryland Shipbuilding and Drydock Company | Baltimore, Maryland | Closed | Closed |
| Newport News Shipbuilding | Newport News, Virginia | X | X |
| Norfolk Shipbuilding and Drydock Company | Norfolk, Virginia | X | X |
| Pennsylvania Shipbuild g Company | Chester, Pennsylvania | X | X |
| **Gulf Coast** | | | |
| ADDSCO Industries, Inc. | Mobile, Alabama | X | X |
| Avondale Shipyards, Inc. | Avondale, Louisiana | X | X |
| Beaumont Yard | Beaumont, Texas | X | X |
| Equitable Shipyards, Inc. | New Orleans, Louisiana | No | X |
| Halter Marine, Inc. | Chicasaw, Alabama | X | X |
| Levingston Shipbuilding Company | Orange, Texas | Closed[3] | No |
| Ingalls Shipbuilding Division | Pascagoula, Mississippi | X | X |
| Marathon LeTourneau Company | Brownsville, Texas | X | No |
| Tampa Shipyards, Inc. | Tampa, Florida | X | X |
| Texas Gulfport Shipbuilding Company | Port Arthur, Texas | X | No |
| Todd-Galveston Division | Galveston, Texas | X | X |
| **West Coast** | | | |
| Gunderson, Inc. | Portland, Oregon | X | No |
| Lockheed Shipbuilding Company | Seattle, Washington | X | X |
| Marine Power & Equipment, Inc. | Seattle, Washington | X | No |
| National Steel & Shipbuilding Company | San Diego, California | X | X |
| Portland Ship Repair Yard | Portland, Oregon | X | No |
| Tacoma Boatbuilding Company | Tacoma, Washington | X | X |
| Todd-Los Angeles Division | San Pedro, California | X | X |
| Todd-San Francisco Division | San Francisco, California | X | No |
| Todd-Seattle Division | Seattle, Washington | X | X |
| Triple "A" Shipyards | San Francisco, California | X | No |
| **Great Lakes** | | | |
| American Shipbuilding Company | Lorain, Ohio | Closed | Closed |
| Bay Shipbuilding Corporation | Sturgeon Bay, Wisconsin | X | X |
| Fraser Shipyards, Inc. | Superior, Wisconsin | X | No |
| Marinette Marine | Marinette, Wisconsin | No | X |
| Peterson Builders, Inc. | Sturgeon Bay, Wisconsin | No | X |
| **Totals** | | **29** | **23** |

[1] According to the Maritime Administration, major shipyards comprise those "that are opened and have either an inclined way, a side-launching platform, or a building basin to accommodate a vessel at least 475 foot length, 68 foot beam" and 12 foot draft. Shipyards are listed as "major" but not in the "Active Shipbuilding Base," if they have the required capability for ship construction but are not seeking newbuilding contracts.

[2] According to the Maritime Administration, shipyards in the Active Shipbuilding Base are defined as those that are currently opened and engaged in or seeking contracts for the *construction* of naval ships or major oceangoing or Great Lakes merchant ships, 1,000 gross tons and over. The Active Shipbuilding Base does not include yards working only on repair.

[3] The Levingston Shipbuilding Company is not now considered a "major" shipyard nor a yard in the Active Shipbuilding Base because of the 1985 redefinition of both categories by the Maritime Administration, which requires yards to be "opened" to be counted.

Adapted from: Maritime Administration. 1984. Report on Survey of U.S. Shipbuilding and Repair Facilities 1984. U.S. Department of Transportation, Washington, D.C., 133 p.
Karlson, E.S. 1985. Personal communication. Director, Division of Production, Maritime Administration, Washington, D.C.

**Table 11.—Shipyards in the Shipyard Mobilization Base.[1]**

**Permanently or Temporarily Closed between October 1982 and June 1985.**

| Shipyard | Location |
|---|---|
| Bethlehem Steel | Baltimore, Maryland |
| Horne Brothers | Newport News, Virginia |
| Hudson Engineering | Hoboken, New Jersey |
| Jackson Engineering | Staten Island, New York |
| Maryland Shipbuilding and Drydock | Baltimore, Maryland |
| Munroe Drydock | Chelsea, Massachusetts |
| Savannah Shipyard | Savannah, Georgia |
| Todd Shipyard | Brooklyn, New York |
| Wiley Manufacturing | Port Deposit, Maryland |
| Burton Shipyard | Port Arthur, Texas |
| Galveston Shipbuilding | Galveston, Texas |
| Geosource, Inc. | Harvey, Louisiana |
| Levingston Shipbuilding | Orange, Texas |
| Teh Tung Steamship | Orange, Texas |
| Todd Shipyard | Houston, Texas |
| Pacific Marine | Honolulu, Hawaii |
| West Winds, Inc. | San Francisco, California |
| Zidell Explorations | Portland, Oregon |
| American Shipbuilding | Lorain, Ohio |
| American Shipbuilding | Toledo, Ohio |

[1] Shipyard Mobilization Base as defined in U.S. Department of the Navy/Maritime Administration. 1984. Shipyard Mobilization Base Study. Unpublished report, Classified SECRET, 153 p.

Sources: Pross, T.W. 1984. Update of Shipyard Mobilization Base (SYMBA) as of October 1, 1984; Memo dated 4 December 1984 to Members, Joint MARAD/Navy Shipbuilding Ship Repair Committee. Maritime Administration, U.S. Department of Transportation, Washington, D.C., 16 p.
Karlson, E.S. 1985. Personal communication. Director, Division of Production, Maritime Administration, Washington, D.C.

The smaller yards will not be discussed in detail in this report. In peacetime, these yards build and repair tugs, towboats and barges for inland and coastal trades, crewboats for the offshore oil industry and various types of fishing vessels. In the major mobilization of World War II, these "second tier" shipyards were extremely active in building small Naval auxiliary vessels, such as minesweepers and subchasers. These yards are considered an important national defense asset to fill a similar role in potential future conflicts. Most of them are not, however, considered a part of the "Shipyard Mobilization Base" or the "National Defense Shipyard Base" as defined in recent Defense Department mobilization studies; these efforts focus on shipyard facilities with the capacity to do activation, battle damage repair, or new construction of large combatants and large oceangoing sealift vessels capable of rapidly delivering military supplies and equipment to troops in Southwest Asia.

Most of our report recommendations will not affect the second tier shipyards or the coastal and inland tug and barge industry. To the extent that our recommendations provide a more competitive environment for self-propelled oceangoing cargo vessels, we have chosen to tip the balance in favor of oceangoing ships rather than oceangoing tug/barge transport in an effort to increase our U.S.-flag sealift assets. The implications of this are discussed in Chapter 5 under Recommendation #8.

## The Orderbook

**Commercial construction:** In the larger yards, the orderbook for oceangoing merchant vessel "newbuilding" (i.e., new vessel construction) has fallen precipitously in the past decade. (See Table 12.) In 1983, no new commercial orders for oceangoing cargo vessels were placed in U.S. shipyards; in 1984, orders were placed for 2 tankers of 209,000 deadweight tons (dwt) each, and 3 containerships of 16,000 dwt each; and no commercial newbuilding orders have been placed in the first half of 1985. These figures reflect a huge reduction from 1975 when 96 commercial ships totalling 5 million gross tons were under construction or on order in U.S. shipyards (Rice, 1984).

**Table 12.—Merchant Ship Orders in U.S. Shipyards, 1973-1985.**

**Vessels 1,000 gross tons and over.**

| Year | Number of Ships[1] | Gross Tons |
|---|---|---|
| 1973 | 41 | 1,978,000 |
| 1974 | 15 | 1,113,300 |
| 1975 | 11 | 507,900 |
| 1976 | 16 | 339,400 |
| 1977 | 13 | 265,500 |
| 1978 | 30 | 394,000 |
| 1979 | 21 | 487,200 |
| 1980 | 7 | 116,200 |
| 1981 | 8 | 148,000 |
| 1982 | 3 | 19,900 |
| 1983 | 0[2] | 0 |
| 1984 | 5 | 266,800 |
| 1985[3] | 0 | 0 |

[1] Includes only oceangoing, cargo-carrying vessels, not those built for special purposes such as dredging or ocean incineration of wastes.

[2] Does not include five products tankers being built for private ownership and private operation under long-term charter with the Military Sealift Command. These vessels are typically not counted as commercial shipbuilding orders, because they are being built solely for U.S. Government charter.

[3] As of August 15, 1985.

Sources: Congressional Budget Office. 1984. U.S. Shipping and Shipbuilding: Trends and Policy Choices. U.S. Congress, Washington, D.C., p. 43. (1973-1983 data)
Karlson, E.S. 1985. Personal communication, Director, Division of Production, Maritime Administration, Washington, D.C. (1984-1985 data)

Both of the 1984 ship orders were prompted by governmental protection policies. Exxon Shipping will use its new tankers in the protected Alaskan oil trade. Under current law, Alaskan oil cannot be exported but must be transported to another U.S. port; the trade therefore falls under the protection of the Jones Act, including a requirement that vessels for the domestic trades be built in U.S. shipyards. Sea-Land is building the containerships for the Jones Act domestic trade, which requires U.S.-built ships, and is probably using tax-deferred Capital Construction Fund deposits from its sale of vessels to the government for sealift purposes. U.S. yards have long depended on Federal programs to provide protected markets for their employment. Virtually all of the merchant vessels built in U.S. yards in the past decade have been built either with Construction Differential Subsidy or for protected domestic trades, but recent changes in Federal maritime support programs and depressed economic conditions have all but halted even this protected commercial construction.

**Military construction:** Military vessels under construction or conversion in private U.S. shipyards in December 1984 included 91 Navy ships, 9 Coast Guard cutters, and 13 Military Sealift Command (MSC) ship conversions (U.S. Naval Sea Systems Command, 1985). Military ship construction and conversion work accounted for almost 90 percent of the work in major private U.S. yards in 1984. Twenty-one private shipyards were doing this work (Table 13), but Navy construction work is highly concentrated in a few yards, however, with almost 70 percent of the contract dollars in 1984 going to just 4 yards. The FY 1985 budget for Navy shipbuilding included 22 new ships and 3 conversions, with total funding of $11.6 billion. The percentage of contract cost that remains in the shipyards has declined as the combatant vessels and their weapons systems have grown increasingly complex; of the $11.6 billion in FY 1985 Navy shipbuilding and conversion (SCN) funds, only about $4 billion remained in the shipyards (Rice, 1985b).

## Ship Repair—Commercial and Military

**Commercial repair work:** With commercial newbuilding orders decreasing, a number of major yards have expanded their facilities for ship repair, mostly for naval ship repair. The majority of the $300 million spent by private shipyards in 1983 for improvements was to expand ship repair and conversion facilities, which has subsequently caused a substantial overcapacity of repair facilities. The vast majority of repair work (in dollars) goes to only a few yards. The commercial repair market remains depressed with revenues estimated at about $400 million a year in 1985, compared to $750 million in 1981, for work on major vessels and large oceangoing tugs (Rice, 1985b). This has been aggravated by a 1984 amendment to the Tariff Act of 1930, allowing U.S.-flag vessels that do not call on U.S. ports for 2 years to obtain ship repair in foreign yards without paying the 50-percent ad valorem tax. In addition, the Administration has proposed repealing the ad valorem tax for all U.S.-flag vessels. A number of shipyards in U.S. ports, however, have repair facilities leased or bonded to the local port authority, guaranteed to be available at all times for repair work. These local arrangements are expected to keep at least minimal shipyard facilities and workforce available in most major U.S. ports.

**Naval ship overhaul and repair work:** Forty-eight private U.S. shipyards received $1.6 billion in Navy contracts for overhaul and repair work in FY 1984. (See Table 13.) This represented 34 percent of Navy ship repair work; the rest went to the public naval shipyards. The Navy is encouraging the private yards to upgrade their capability to overhaul and repair complex new naval combatants to deal with the maintenance needs of the modern 600-ship Navy. There are 141 shipyards and topside repair shops having Master Ship Repair Agreements qualifying them to bid on Navy work, so the competition for this work is keen.

While some repair facilities might not easily be converted to shipbuilding work during a major conflict, many yards would be needed, at least initially, only for early mobilization work that would not require shipbuilding capability.

## Employment

Shipyard employment numbers published in various sources must be used with care, because there are so many different ways of categorizing and counting shipbuilding facilities and shipbuilding workers.

Total shipyard employment may be given for private yards, public yards, or both combined. Shipbuilding employment may include related activities, such as ship design or consulting companies, or may comprise only workers in actual shipbuilding and ship repair facilities. Some government publications count only workers in a specific set of shipyards, such as the "Active U.S. Shipbuilding Base" or the "Shipyard Mobilization Base." Within a given set of facilities, all workers at the shipyard may be counted, including supply clerks and administrative personnel, or "production" workers only may be presented, meaning the skilled labor actually involved in building ships. Individual shipyards differ widely, however, in how they define their production workers.

Already skilled production workers are probably a more important measure for mobilization, because they would be required for activating and converting vessels immediately for a major mobilization, although this type of shipyard work presumably requires less complex skills than would other wartime tasks such

**Table 13.—Private U.S. Shipyards with Navy Work.**
**Construction/Conversion/Overhaul/Repair (during fiscal year 1984).**

**Hawaii Area**
Dillingham Shipyard

**Puget Sound Area**
Lake Union Drydock Company
*Lockheed Shipbuilding Company
Marine Power & Equipment, Inc.
*Tacoma Boatbuilding Company
*Seattle Division-Todd Shipyards Corporation

**San Francisco Bay Area**
*Continental Maritime of San Francisco, Inc.
Pacific Drydock and Repair Company
Service Engineering
Southwest Marine of San Francisco, Inc.
San Francisco Division-Todd Shipyards Corporation
Triple "A" Shipyards

**Los Angeles Area**
Al Larson Boat Shop
Southwest Marine, Inc.
*Los Angeles Division-Todd Shipyards Corporation

**San Diego Area**
A&E Industries, Inc.
Arcwel Corporation
Continental Maritime of San Diego, Inc.
*National Steel and Shipbuilding Company
Southwest Marine, Inc.
Triple "A" South

**Great Lakes Area**
Bay Shipbuilding Corporation
*Marinette Marine
*Peterson Builders, Inc.

**Gulf of Mexico Area**
*Beaumont Yard-Bethlehem Steel Corporation
*Avondale Shipyards, Inc.
*Ingalls Shipbuilding Division-Litton Systems, Inc.
ADDSCO Industries, Inc.
Runyan Machine & Boiler Work3, Inc.
*Tampa Shipyards, Inc.
*Bell Aerospace, Textron
*Galveston Division-Todd Shipyards Corporation

**New England Area**
*Bath Iron Works Corporation
Boston Shipyard Corporation
General Ship Corporation
*Quincy Shipbuilding Division-General Dynamics Corporation
Munro Drydock, Inc.
Newport Offshore Ltd.
*Electric Boat Division-General Dynamics Corporation
*Robert E. Derecktor of Rhode Island, Inc.

**Middle Atlantic Area**
Coastal Drydock & Repair Corporation
Hoboken Shipyards, Inc.
Perth Amboy Drydock Company
*Pennsylvania Shipbuilding Company
*Sparrows Point-Bethlehem Steel Corporation

**Norfolk, Virginia Area**
Allied Repair Service, Inc.
Colonna's Shipyard, Inc.
Horne Brothers, Inc.
The Jonathan Corporation
Metro Machine Corporation
*Newport News Shipbuilding
Norfolk Shipbuilding and Drydock Company

**Charleston, South Carolina Area**
Braswell Shipyards, Inc.
Detyens Shipyards, Inc.
Metal Trades, Inc.
Swygert Shipyard, Inc.

**Florida Atlantic Coast Area**
Atlantic Dry Dock Corporation
Bellinger Shipyard
Jacksonville Shipyards
Tracor Marine, Inc.

* Connotes construction or conversion work, including federally funded construction of U.S. Coast Guard vessels and privately funded construction of vessels that will be chartered by the Military Sealift Command.

Corrected from: U.S. Naval Sea Systems Command. 1985. Status of Shipbuilding and Ship Repair Industry of the United States. The 1984 Annual Report of the Coordinator of Shipbuilding, Conversion and Repair. Department of Defense. Washington, D.C., p. 2, 13 and 18.

as battle damage repair and accelerated new construction. Total shipbuilding employment, including such skills as design and teaching, would be more important in a prolonged conflict.

Comparison of figures provided by the Shipbuilders Council of America, the Maritime Administration, the U.S. Naval Sea Systems Command, and the Bureau of Labor Statistics suggests that currently about 78,500 workers are in public shipyards, 48,000 of which are considered production workers. In the private shipbuilding industry, about 170,000 workers appear to be in all shipbuilding-related fields; about 155,000 workers are in yards doing Navy work, and 141,000 are in yards listed by DOD in its Shipyard Mobilization Base. About 96,000 workers in private shipyards can be considered production workers. The Nation's total (private and public) shipbuilding employment base is thus almost 250,000, including roughly 150,000 skilled production workers in U.S. shipyards.

Despite the steady military ship construction for the 600-ship Navy and Military Sealift Command ships, shipyard employment levels have declined in recent years, owing to a worldwide recession in shipbuilding and changes in U.S. Government policies. A Maritime Administration memorandum (Pross, 1984; Karlson, 1985) compares October 1984 employment levels in the Shipyard Mobilization Base to those of October 1982. Employment in the SYMBA yards represents over 90 percent of the Nation's shipyard employment. Production workers (not total employment) in private SYMBA yards fell 14.7 percent to 95,935 over the 2-year period, and public yards fell 5.7 percent to 44,919; the overall total employment level dropped 12.0 percent to 140,854. From 1978 to 1983, the production workforce in all U.S. shipyards dropped from 170,000 to 153,000, almost a 9-percent decrease. Employment would probably have decreased even further, if the U.S. shipyards were not so heavily involved in the building of complex Navy combatants, which is very labor intensive. Building a 2,500 ton combatant has been estimated to require the same shipyard workload as a 60,000 dwt cargo vessel (Mazza, 1984).

The commercial ship repair market supports about only 7,000 production workers in U.S. shipyards (Rice, 1985b).

As illustrative of the cyclical nature of the industry, it is interesting to note that 18 of the SYMBA yards lost at least 50 percent of their production workers from October 1982 to October 1984, while another 17 yards increased more than 50 percent in production workers in the 2-year period (Pross, 1984).

## An Historical Perspective

To add an historical perspective to the present plight of the shipyards, the industry has long been subject to radical changes in work demand and has long been unable to compete with foreign yards. American ships were highly cost-competitive in the days of wooden vessels, because of a plentiful supply of shipbuilding timber and low wage rates. In the early 1800s, the United States was in fact a developing nation well able to compete with European shipbuilding, and many British-flag vessels were built here. After the U.S. Civil War, however, when iron ship construction replaced wood, ship construction costs were 33 percent higher in the United States than they were in Great Britain (Fassett, 1948), and U.S. shipbuilding has rarely been competitive since.

A review of shipbuilding of steel merchant vessels in the United States from 1914 to 1945 shows that, over those 32 years, 96 percent of the total vessel construction took place during the two war eras. What little shipbuilding occurred between the two World Wars (1920 to 1936) was prompted by government action—loan and tax provisions of the Merchant Marine Acts of 1920 and 1928. The Merchant Marine Act of 1936 recognized that the U.S. shipping and shipbuilding industries were not competitive internationally and established the construction and operating differential subsidies; it also established a new Maritime Commission charged with formulating a workable plan for replacing obsolete World War I vessels in sufficient numbers to serve U.S. operators in essential trade routes. The Maritime Commission ordered a government-funded building program of 50 standard-design cargo vessels per year for 10 years (Lane, 1951).

Many of these standard vessels were built just before and during World War II, and the 10-year program was completed as part of the massive World War II building program that included thousands of LIBERTY and VICTORY ships built for sealift. Rarely since the end of World War II have U.S. shipyard orderbooks been sufficiently full to provide long-term stability.

Prompted by the Korean conflict in the 1950s, the U.S. Government built 35 Mariner cargo ships, most of which were bought by commercial operators for foreign trade. This was before the advent of major shipbuilding competition in the Orient. The cost differential in U.S. shipbuilding is currently so great that such a Federal build-and-sell program would be unlikely to succeed in today's market. There was a surge in shipbuilding and conversion work while the world liner trades converted from breakbulk to containerships, followed by a great contraction in the shipbuilding market. In the late 1960s, as the world market for merchant vessels slackened, many European nations responded to the growing demand for naval vessels and patrol boats in developing nations, but such exports by U.S. yards have been disproportionately small (Mazza, 1984). In the early 1970s, merchant shipbuilding orders in U.S. yards rose slightly in response to amendments in the Merchant Marine Act of 1970 (which finally allowed construction and operating subsidies for bulk vessels) and peaked in the late 1970s with the building of tankers for the domestic carriage of oil newly discovered in Alaska. Recently, there has been a major contraction in commercial shipbuilding following the overbuilding of tankers and a drop in world oil prices.

Figure 1 shows total employment in the U.S. private shipbuilding and ship repair industries since 1923, according to records of the Bureau of Labor Statistics. Except for the tremendous World War II peak, the employment base has risen fairly steadily over the past six decades despite the steady decline in the U.S.-flag fleet and the large decline in commercial shipbuilding orders. The 1977 to 1981 employment levels actually represented a post-World War II high, and the 1983 level fell only to the employment base of the mid-1970s.

## The Policy Debate

In June 1984, the Shipbuilders Council of America issued "A National Shipbuilding Policy." It asserts that the Departments of Defense and Transportation must define the shipyard mobilization base needed for national emergency; must have all government and all Jones Act vessels built and repaired in U.S. yards of the defined mobilization base; and must provide government-initiated building and repair programs as necessary to maintain enough work for these yards (Shipbuilders Council of America, 1984). The Administration, on the other hand, has been moving in the opposite direction, advocating increased foreign shipbuilding and repair for commercial ship operators and increased government acquisition of existing hulls for sealift needs. See Appendix 4 for a detailed listing of the Administration's announced maritime policies (Lewis, 1982). A quote from a 1948 book on U.S. shipbuilding illustrates the longstanding nature of the argument:

> *The high cost of ships in the United States, as compared with the cost of building similar*

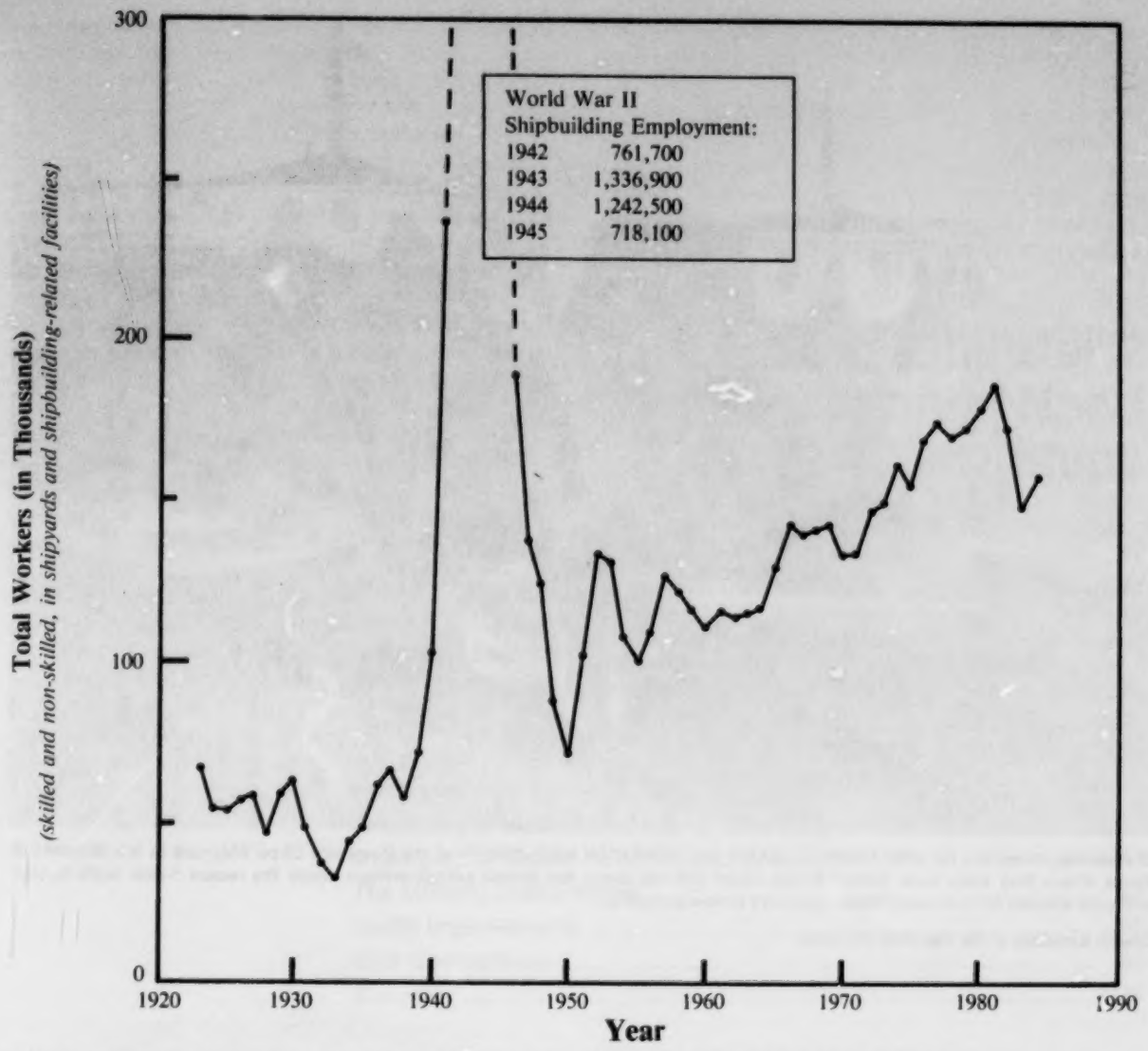
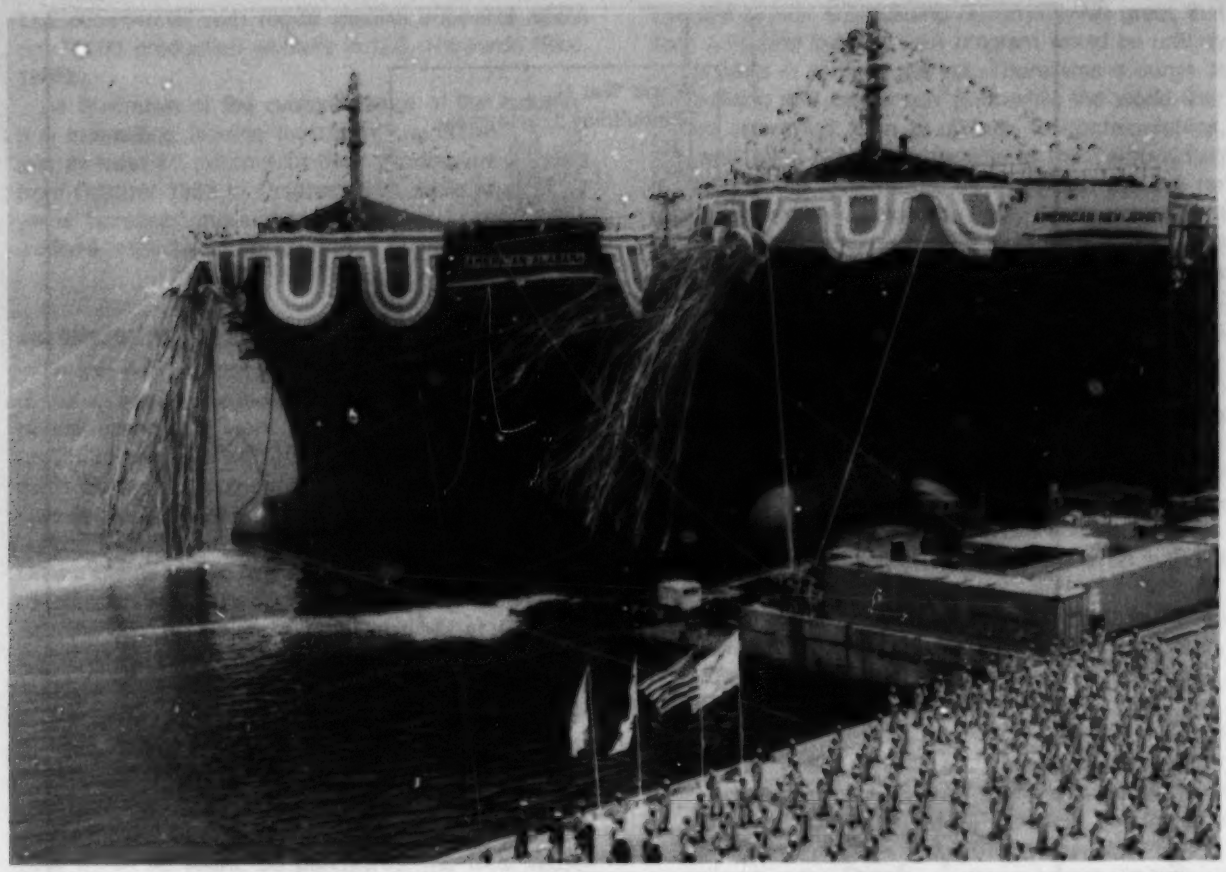



**Figure 1.—Total Employment in Shipbuilding and Repairing Industries of the United States, 1923-1984.**

Source: Bureau of Labor Statistics. 1985. Employment, Hours, and Earnings, United States, 1909-84. Volume 1, Bulletin 1312-12, U.S. Department of Labor, Washington, D.C., 943 p.

*vessels abroad, has been a controlling factor in the development of American shipping in foreign trade (Fassett, 1948).*

The high cost of U.S. shipbuilding will continue to hamper the American shipping industry only so long as the build-U.S. requirements are maintained. As the commercial competitiveness of the major U.S. shipyards has decreased, their national defense importance in meeting sealift demands for future conflicts has been increasingly emphasized. The high estimated cost of proposals to support the existing shipbuilding base has caused the Department of Defense and others to take another look at how to meet national sealift requirements. The dispute at hand is not over the need for an adequate mobilization base to meet wartime requirements, but over the level of shipyard capacity considered to be adequate. Stated more broadly, the dispute concerns the relative importance, in the event of a major conflict or national emergency, of ready shipping assets versus ready shipbuilding capacity. The projected requirements for each, and the projected availability of each, are addressed in Chapter 2 (ships) and Chapter 3 (shipyards).



**Christening ceremony for *AMERICAN ALABAMA* and *AMERICAN NEW JERSEY* at the Daewoo's Okpo Shipyard in the Republic of Korea where they were built. United States Lines ordered these two jumbo containerships under the recent 1-year build-foreign authority allowed for U.S.-subsidized operators in foreign trades.**

**Credit: Embassy of the Republic of Korea.**

# Chapter 2
# Sealift: The Defense Need for Merchant Ships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# CHAPTER 2
# Sealift: The Defense Need for Merchant Ships

## Sealift Requirements

The present wartime planning scenario agreed upon by the Joint Chiefs of Staff postulates a prolonged, global, conventional, three-theatre conflict. With troops to be delivered or advanced in three theatres, the timing and scheduling of supplies and equipment become critical. This is especially true in Southwest Asia, where sealift assistance from our allies is unlikely, land-based prepositioning of supplies is problematic, and the sea lines of communication are very long.

Defense planners quickly realized that much of the supplies and equipment required for a Southwest Asia deployment would not arrive in a timely fashion. Sufficient increases in either military amphibious vessels or airlift were deemed too expensive a solution; increased use of merchant vessels that required emergency modifications would not be rapid enough; and great increases in prepositioning of supplies on land in the region would reduce flexibility in responding to different scenarios; thus the idea of at-sea prepositioned supplies became a reality (Kelley, 1984).* By the summer of 1980, seven merchant vessels were chartered for the Near-Term Prepositioned Force (NTPF) based in Diego Garcia in the Indian Ocean.

Sealift requirements fall into three categories:

- Floating prepositioned storage of supplies.
- Rapid initial overseas deployment of forces, their equipment and supplies (surge sealift).
- Long-term resupply of overseas forces (sustaining sealift).

In addition, shipping assets would be needed for:

- Import of critical materials and some ordinary trade (economic security shipping).
- Domestic waterborne transport of critical materials (e.g., strategic petroleum reserve oil to refineries).

Since 1981, the Department of Defense, in cooperation with the Maritime Administration, has completed a series of studies quantifying requirements for prepositioning of supplies, airlift and sealift, delivery of liquid products, and shipping needs at home during a global conflict. These studies are discussed below.

### The "Congressionally Mandated Mobility Study"

The Department of Defense Authorization Act of 1981 required that the "Secretary of Defense conduct a study to determine overall U.S. military mobility requirements including the total mix of airlift, sealift, and prepositioning required for contingencies in the Indian Ocean area and other areas of potential conflict during the 1980s" (U.S. Department of Defense, 1981). The resulting "Congressionally Mandated Mobility Study" (CMMS) was completed in 1981. The report highlighted the importance of the timeliness, as well as the capacity, of various lift solutions: timely arrival of fully equipped forces would likely preclude the need to deploy greater force strength later on in a conflict. The study concluded, however, that an "airlift only" solution would be unaffordable. A single mechanized Army division, for example, requires more than 100,000 tons of cargo for deployment and over 1,000 tons per day of resupply. Every ton of cargo delivered by air to Southwest Asia would require 6 to 7 tons of aviation fuel, and fuel for return flights might not be available. One of the Military Sealift Command's Modern Fast Sealift Ships has the same carrying capacity as 150 C-5 cargo aircraft (Holloway, 1983). The CMMS report set a reasonable goal for addition of airlift (20 million ton-miles per day) and recommended that this be supplemented by additional prepositioning and more and faster sealift.

### The "DOD Sealift Study"

In the summer of 1982, the Defense Resources Board took up the issue of sealift and prepositioning and chartered a study of sealift requirements, which was completed in March 1984. The "DOD Sealift Study" (U.S. Department of Defense, 1984) assumes the airlift capacity recommended by the CMMS report, and models remaining sealift, prepositioning and cargo offload requirements for *dry cargo*, especially oversized

* Actually, defense planners introduced the concept 20 years ago as the Fast Deployment Logistics Ships (FDLS), but Congress cancelled the proposed program in 1967 during the Vietnam buildup because of sensitivity to overseas military involvement. President Carter later reinstated the program proposal as a means to defend Persian Gulf oil fields (Wilson, 1984).

and outsized military "unit equipment." The planning scenario is that of the Joint Chiefs of Staff—a worldwide, conventional war, starting in Southwest Asia and spreading to the NATO countries, to Korea and into three oceans. Because surge and sustaining sealift needs in the NATO and Northeast Asia theatres would be provided mainly by allied shipping in these regions, sealift requirements are examined principally for projection of forces to Southwest Asia and their resupply. Several scenarios, differing in U.S. response time to pre-conflict warning signs and in our time of entry into the conflict area, are tested.

Conclusions drawn from the study were made public in a letter from the Secretary of Defense to the Secretary of Transportation (Weinberger, 1984): "The current best estimate of the sealift necessary" to meet dry cargo lift requirements for Southwest Asia is sufficient shipping capacity to. . ."move about 800,000 short tons of military unit equipment. . .during surge operations and about 1.7 million short tons of resupply and ammunition during sustaining operations." Timely delivery is estimated to require 4.6 million dwt of shipping capacity for surge and an additional 3.3 million dwt for sustaining sealift. Combining all government-controlled sealift assets, ongoing DOD programs to enhance the sealift capability of commercial vessels, and a Maritime Administration study projecting a modest 15-percent decline in militarily useful U.S.-flag shipping (from 1.9 to 1.6 million dwt), the "DOD Sealift Study" concluded that U.S. sealift capacity was more than adequate for resupply and marginally adequate for a full deployment. A Navy program to convert containerships to militarily useful vessels (program described below) reduced the shortfall in dry cargo surge capacity to an estimated 10 percent, a risk deemed acceptable given the uncertainties of the study. A more recent Maritime Administration projection, however, showed a 52-percent decline in U.S.-flag dry cargo shipping (from 1.9 to 0.9 million dwt), which would create a significant shortfall in required sealift capacity. This later projection has prompted increased Navy efforts to expand the size of government-controlled sealift assets.

## The "DOD Sealift Tanker Study"

The 1984 "DOD Sealift Study" concluded that there was a serious short-fall of prepositioned POL (petroleum, oil and lubricants) ships in some areas and that the United States would be heavily dependent on full use of U.S.-owned tankers registered under foreign flags to sealift the required supplies. A follow-on study addressing the sealift requirements for tankers was initiated, and the "DOD Sealift Tanker Study" is nearing completion. It is expected to support the earlier conclusions and document a significant shortfall in tankers to meet both military and economic support requirements (Christie, 1985). Potential solutions identified in the study will probably include:

- Using uncoated tankers* to carry bunker fuels; in other words, expanding the restrictive definition of militarily useful vessels with respect to tankers.
- Allowing U.S.-owned/foreign-flag uncoated tankers to enter the normally protected Jones Act coastwise domestic trade during time of serious national emergency, thereby freeing coated* U.S.-flag tankers to meet military requirements overseas.
- Negotiating commercial contracts with selected overseas sources of refined petroleum products.
- Requesting tanker support from our allies.

The study is expected to recommend that, until the success of these alternate solutions is tested and the policy issues they raise are decided, suitable tankers being retired from commercial service be purchased by the U.S. Government for addition to the Ready Reserve Force (RRF) fleet. A request to increase the authorized number of RRF tankers from 16 to about 36 is expected.

## The "Economic Security Shipping Study"

The letter from the Secretary of Defense to the Secretary of Transportation (Weinberger, 1984) also requested a companion study by the Department of Transportation on shipping capacity necessary to satisfy the needs of the industrial base and the civil economy during a major conflict. The Maritime Administration study designates essential cargos, forecasts various levels of denial of imports, forecasts shipping assets available, addresses attrition (sinking) of ships, and analyzes the wartime economic shipping requirements for both import and domestic transport of critical materials.

The study concludes that most dry general cargo (i.e., containership, breakbulk, regular "liner" routes) is nonessential, thus virtually all U.S.-flag containerships can be used for overseas sealift without causing shortfalls in this type of shipping capacity at home. In addition, no shortfall in dry-bulk capacity is expected (e.g., ores), because most critical materials are needed in small enough quantities that they could be imported by air. According to the study draft (Stryker, 1985), the U.S.-flag fleet has sufficient tanker capacity to handle domestic trade needs in wartime, and U.S.-owned, foreign-flag vessels have sufficient capacity

* Uncoated tankers have tanks with a bare metal surface that require periods of steam cleaning (called "Butterworthing" after the man who developed the technique) to remove crude oil residue before the tankers can be used to carry refined petroleum or other products. Coated tankers have a chemically complex covering applied to the surface of their tank(s) that allows rapid and thorough cleaning and consequently rapid changes from one type of liquid cargo to another.

to carry U.S. wartime oil imports, if sealift needs for carrying petroleum products to overseas troops are not considered. Small, coated tankers in the U.S.-flag fleet will certainly be required, however, for both wartime sealift and domestic POL transport; a shortfall for these is thus projected.

## Summary

- The projected shortfall in dry cargo sealift is being addressed principally by increases in government-owned sealift vessels and increased funding for modifying commercial cargo vessels.
- The shortfall in wet-bulk POL sealift will apparently be addressed by purchase of tankers for the Ready Reserve Force while examining the alternatives of foreign petroleum supply, allied tankers, and expanded use of U.S.-owned, foreign-registered assets.
- If, during a conflict, most of the U.S.-flag coated tankers are used for POL sealift, there will be a shortfall in tanker capacity for domestic petroleum carriage. The degree of this problem would be governed by decisions made on how to deliver POL to overseas forces. Some of this shortfall could be alleviated by allowing foreign tankers (owned by U.S. citizens) to enter the protected Jones Act trade during time of a major conflict.

## Sealift Assets

The United States has a large number of sources for sealift vessels under government ownership, U.S. and foreign flag. Having examined the requirements for sealift in a major conflict, we will now review the number, suitability, availability and cost of our sealift assets.

### Sources of Sealift Vessels

U.S. sealift needs in time of a major conflict could be met with vessels from a number of sources. (See Table 14.) They are listed here in likely order of callup:

**MSC - Military Sealift Command of the Navy.**
MSC vessels are government-owned or leased from commercial operators, and include cargo vessels suitable for and dedicated to strategic sealift. The MSC fleet of strategic sealift assets is being increased dramatically.

**RRF - Ready Reserve Force.**
The RRF is maintained by the Maritime Administration with Navy funds; it comprises the most ready vessels of the National Defense Reserve Fleet. The RRF, formed in 1976 because of decreasing sealift assets in the declining U.S-flag fleet, consists of merchant sealift vessels that can be activated without drydocking in 5, 10 or 20 days.

**Table 14.—Sealift Sources.**

**Vessels available for sealift (as of July 1, 1985).**

| Fleet[1] | Operator | Number of Ships | Dry Cargo or Combination Vessel | Tanker Vessels |
|---|---|---|---|---|
| **MSC[2]** | | | | |
| Military Sealift Command-active | Navy | 55 | 32 | 23 |
| **RRF** | | | | |
| Ready Reserve Force | Maritime Administration (with Navy funds) | 75 | 68 | 7 |
| **SRP[3]** | | | | |
| Sealift Readiness Program | Private | 161 | 142 | 19 |
| **OTHER U.S.-FLAG[4]** | Private | 266 | 70 | 196 |
| **EUSC[5]** | | | | |
| Effective U.S.-Control | Private | 364 | 122 | 242 |
| **NDRF** | | | | |
| National Defense Reserve Fleet | Maritime Administration | 290 | 272 | 18 |
| **NATO** | | | | |
| North Atlantic Treaty Organization | NATO-nation | 400 | Number committed by NATO allies for U.S. sealift to Europe.[6] | |

[1] Sources of available sealift vessels are listed in likely order of "call up" in a national emergency.

[2] Commercially owned vessels under charter to the Military Sealift Command; this is a subset of the "U.S.-flag" fleet.

[3] Active commercial U.S.-flag operators receiving subsidy or carrying military cargos have agreed to make their vessels available in case of national emergency; this is a subset of the "U.S.-flag" fleet.

[4] U.S.-flag vessels not in the Sealift Readiness Program or under charter to the Military Sealift Command. Note that the total count of U.S.-flag vessels, including SRP and MSC-charter, is 482. Note that this count is for July 1, 1985; Table 6 is for January 1, 1985.

[5] U.S.-owned vessels under Panamanian, Liberian, Honduran or Bahamian registry. Nothing in the laws of these four nations prohibits immediate return of vessels to the U.S. flag in case of national emergency.

[6] Assume allied vessels from Orient available for U.S. sealift to Northeast Asia.

Source: Office of Policy and Plans. 1985. Personal communication. Maritime Administration, U.S. Department of Transportation, Washington, D.C.

**SRP - Sealift Readiness Program.**

The SRP is administered by the Military Sealift Command. All U.S.-flag vessels that receive, or have received, Federal subsidy (CDS/ODS), and 50 percent of any U.S. operator's fleet that carries military cargo under MSC contract. Vessels are available to MSC on request, under conditions short of mobilization.

**U.S.-flag - Any other U.S.-flag vessel.**

All U.S.-flag vessels are subject to requisition in national emergency. Idle vessels would probably be taken first. About 70 percent of this fleet has been deemed "militarily useful." *All* of the militarily useful U.S.-flag vessels would be needed and would be called up through charter or requisition in the case of a major U.S. mobilization. Recent Maritime Administration projections of the future U.S.-flag fleet have varied greatly, with an estimated decline of 15 percent to as much as 52 percent by 1988 to 1990.

**EUSC - Effective U.S.-Control Fleet.**

These are U.S.-owned vessels under foreign flag in Liberia, Panama, Honduras, and the Bahamas. The laws of these countries do not preclude or limit U.S. authority to requisition U.S.-owned vessels in time of a declared national emergency. U.S. law (Section 902 of the Merchant Marine Act of 1936, as amended) allows requisition of any U.S.-owned vessel regardless of registry, but the laws of most nations preclude such U.S. action. Some EUSC vessels would be used to sealift supplies to overseas U.S. troops, but most would be used to replace U.S.-flag vessels taken out of regular domestic and foreign trades by mobilization.

**NDRF - National Defense Reserve Fleet.**

The NDRF is maintained by the Maritime Administration and includes the RRF vessels funded by Navy and non-RRF vessels funded by the Maritime Administration. Roughly half of the NDRF at the end of 1984 was comprised of World War II VICTORY ships that require 20 to 61 days to activate, including drydock time. The Maritime Administration has been "trading out the old VICTORY ships, only 97 remained in this fleet at the end of 1984, and all are scheduled to be traded out by 1990 (Maritime Administration, 1985c). Upon mobilization, the Military Sealift Command would get 19 NDRF non-VICTORY vessels for Navy fleet support. According to present plans, the remaining reserve vessels would not be initially mobilized for sealift but would be reserved to replace attrition losses (sealift vessels sunk), to handle industrial base import shipping, and to replace active U.S.-flag vessels taken out of trade to protect U.S. access to established peacetime trade routes.

**Allied shipping.**

Allied shipping will be relied upon for U.S. military sealift in NATO and Northeast Asia operations, but none is expected to be available for a Southwest Asia deployment. In a global conflict, Allied vessels would be engaged in operations in their own theatre; in a more limited U.S. action, such as in Southwest Asia, the Allies might choose not to support our role.

**Angary.**

This is a practice in customary international law, also authorized in U.S. law, whereby belligerent states may exercise the power of requisition over neutral ships, but not crews, in their territorial waters (50 U.S.C. §196; Carlisle, 1981). If absolutely necessary, the United States could acquire additional sealift vessels quickly in this fashion, but no provision for acquiring vessels through angary is included in current mobilization plans. The obvious political problems, coupled with the practical problems of quickly using unfamiliar foreign vessels without experienced crews aboard, relegates this to consideration only if no other alternative were available.

The usefulness of active commercial vessels for sealift was dramatically illustrated by the United Kingdom's prosecution of the recent Falklands War. Three-fourths of all British vessels that sailed into the Falklands were merchant ships with civilian crews. They were central to the success of the operation, according to military experts on both sides of the Atlantic. In just 2½ months, 50 commercial vessels were "taken up from trade" on government charter, converted, loaded and sailed south; 27 of the 50 sailed within the first month (Villar, 1984). A similar U.S. campaign would likely employ U.S. Marine amphibious forces, but for a major, global conflict, present U.S. mobilization plans include call-up of all 350 vessels deemed militarily useful in the U.S.-flag commercial fleet.

## Availability of the Effective U.S.-Control Vessels

Availability of the Effective U.S.-Control (EUSC) fleet in a national emergency has been argued for decades. Owners of foreign-registered vessels have been the strongest proponents of the EUSC's defense utility, and the U.S. seagoing labor unions and shipyards have been the most vocal doubters. Many U.S.-owned vessels have been under obligation to return to the United States during a national emergency, through contracts signed when "flagging out" to foreign registry or under U.S. Government war risk insurance contracts. Regardless of whether or not these obligations exist, legal authority for the U.S. Government to requisition any U.S.-owned vessels in times of national emergency is contained in §902 of the Merchant Marine Act of 1936, as amended.

Arguments against reliance on the EUSC fleet include the assertion that the foreign crews may not choose to serve on a U.S. vessel in times of conflict; most of the vessels are very large, uncoated crude oil tankers not considered militarily useful; and location of the vessels at the outset of a conflict might be inconvenient, or could even be manipulated by an enemy nation through open-market charters. While academicians debate the legalities of U.S. requisition of foreign-flag vessels, DOD has largely concluded that EUSC ships would be available in a national emergency and has based its mobility planning on that assumption. There have been two recent tests of this notion. During the Vietnam conflict, U.S. owners offered handy-sized tankers from the EUSC fleet for the voluntary tanker pool to supply U.S. troops in Southeast Asia. Minor modifications of the vessels were required to allow fueling underway, and the shipowners voluntarily paid the $50,000 per ship cost (Loree, 1985). During the Yom Kippur Arab/Israeli War of 1973, Liberian President Tolbert issued an Executive Order prohibiting Liberian-registered vessels from supplying Israel or the Arab nations. He was politically aligned with the Organization of African Unity which supported Egypt and Syria in the war, but a large number of his Liberian-flag vessels belonged to U.S. owners (Carlisle, 1981). The Executive Order was repealed 8 hours later, and President Tolbert also clarified that vessels under contractual obligation to the United States would have been exempt from the order (Yourch, 1985).

Although it is impolitic for the U.S. Departments of State or Defense to say so, it can also be argued that—in an extreme emergency—the United States might simply take the ships, and the nations of registry could hardly prevent it. Roughly 36 percent of the Liberian fleet and 17 percent of the Panamanian fleet are under U.S. ownership (Office of Technology Assessment, 1983) and, when combined with U.S.-flag vessels, comprise one of the largest national-owned fleets in the world. NACOA believes that a resource of this magnitude must be fully utilized. (Appendix 5 further discusses availability of the EUSC fleet.)

## Availability of Crews

Sealift vessels taken up quickly from the inactive reserve fleets, from the EUSC fleets or through angary present the potential problem of having no crew or a foreign crew aboard. Retired Chief of Naval Operations, Admiral Holloway, estimated in 1973 that about 38,000 U.S. civilian mariners, licensed and unlicensed, were available in the labor pool to fill the 21,500 commercial and MSC billets needed in peacetime. The additional 8,000 billets then estimated to be required for mobilization of the entire National Defense Reserve Fleet thus did not appear to present a problem (Holloway, 1983).

Because of substantial progress in the Navy's strategic sealift programs, the number of crewmembers required for emergency manning of reserve and foreign-flag vessels has changed somewhat since 1983. The number of NDRF vessels has decreased as World War II vessels are being removed from the reserve fleet. In addition, current mobilization plans do not include early mobilization of all NDRF ships; most would be used as "attrition fillers" to replace sealift or domestic trade vessels lost in a conflict. The requirement for manning NDRF ships can thus be assumed to entail a more gradual buildup than anticipated in past plans where the entire fleet was mobilized for early sealift duties. On the other hand, crew requirements for mobilization have increased as the Ready Reserve Force has been expanded. Most of these newer vessels will be maintained in 5- or 10-day readiness status and will thus require crews to be available very quickly in case of national emergency. In addition, the Department of Defense has recently increased the number of Effective U.S.-Control vessels considered militarily useful. Although most of the foreign crewmembers on these vessels are from U.S.-allied nations, and they are often long-term, loyal employees of their shipping companies, some may be asked to act contrary to the interests of their own home countries and may thus not be available for a U.S. deployment. As DOD increases the number of EUSC vessels counted as early mobilization assets, such potential problems of foreign crew availability will presumably increase.

A recent Maritime Administration study on "Reserve Fleet Crewing Feasibility 1984-1995" (Maritime Administration, 1985b) examined projections in the number of U.S. merchant mariners expected to be working through 1995 and the number of mariners expected to be required for crewing the U.S. reserve fleets (not including any crew for the Effective U.S.-Control ships). The privately owned commercial oceangoing fleet, according to this report, is expected to decline in the number of U.S. mariners employed. Assuming a decline to a 2:1 ratio of active mariners in the labor pool versus peacetime seagoing billets to be filled, the Maritime Administration concludes that through 1990 to 1995 sufficient mariners of all types will be available to crew the ships of the Ready Reserve Force, but minor shortages might appear in unlicensed engine room personnel if the entire National Defense Reserve Fleet were mobilized.

While the number of U.S. mariners appears to be sufficient for full mobilization, the training may not be, because many licensed officers may not have had any seagoing training or experience for years or possibly decades. NACOA believes that the issue of merchant mariner readiness requires further attention. Retired Vice Commandant of the Coast Guard, Vice Admiral Scarborough, offered several suggestions to improve sealift crew readiness (Scarborough, 1985). He sug-

gests that Effective U.S.-Control ships be required to carry a minimum number of U.S.-citizen officer crew, and further that these crews be members of the Navy's Merchant Marine Reserve. Admiral Scarborough contends that these requirements could be imposed through the War Risk Insurance program or other Federal statutes, or could be encouraged on a voluntary basis if U.S. crew wages continue to be reduced. He further suggests that each officer billet on all U.S. reserve and EUSC ships be designated mobilization billets for Merchant Marine Reserve officers, and the officers' training be appropriate to their mobilization billet. NACOA endorses this approach and believes that the Navy should formulate plans for revamping its Merchant Marine Reserve.

## The Militarily Useful Vessel

Development of the containership revolutionized dry cargo shipping. In the old "breakbulk" vessels, cargo was bagged, drummed or palleted; the cargo was arranged by lumber supports (dunnage) built specifically for each voyage; and cranes aboard ship loaded and unloaded the cargo. Modern containerships carry cargo enclosed in standardized containers (20 or 40 feet long) that transfer easily to rail or truck beds; the containerships usually have no onboard crane capacity and are loaded and unloaded by complex shore-based cranes. With rising fuel prices in the 1970s, vessels also grew larger and slower to increase fuel efficiency per ton of cargo. The movement of oil has progressed from oil drums loaded on breakbulk vessels to bulk vessels with large integral tanks, culminating in the Ultra Large Crude Carrier (ULCC) carrying more than 400,000 dwt of oil.

These trends prompted defense planners to begin defining the criteria for a militarily useful merchant vessel. Ideal vessels for sealift purposes were defined as small (less risk of cargo loss per target), fast, shallow-draft, self-unloading vessels. In addition, dry cargo ships should be capable of carrying non-containerized, outsized heavy "unit equipment" (such as tanks, helicopters); tankers should be coated so that the vessel can quickly be switched from carriage of crude oil to refined petroleum products or other liquid cargos. Table 15 shows a listing of characteristics used to define a militarily useful vessel in the "DOD Sealift Study"; Table 16 illustrates how significantly these

**An older breakbulk cargo vessel carries her own cranes onboard for loading and off-loading cargo on pallets. This would allow off-loading of military cargoes in undeveloped or battle-damaged port areas, but loading and unloading of this type of vessel are labor-intensive and time-consuming.**

**Credit: The Transportation Institute.**

**Table 15.—Characteristics of a Militarily Useful Vessel.**

A ship is considered militarily useful for sealift if it meets any of the following criteria:

- —Oceangoing dry cargo ships over 6,000 deadweight tons.
- —Coated tankers with a deadweight over 6,000 tons and up to 82,000 tons, and larger coated tankers with less than 106-foot beam.[1]
- —Integrated tug/barge units (general cargo and petroleum products).
- —Dry cargo ships with special military capability.
- —National Defense Reserve Fleet/Ready Reserve Force ships retained for national defense purposes and designated for activation.
- —NATO dry cargo ships nominated for use by U.S. forces in a NATO reinforcement.
- —Militarily useful, U.S.-owned/foreign-flag ships in the Effective U.S.-Control Fleet (EUSC).
- —U.S. and EUSC-flag passengerships.

A ship is considered not militarily useful for sealift if it is any of the following:

- —Dry-bulk or ore-cargo carriers.
- —Integrated tug/barge units (dry-bulk or chemical).
- —Liquified natural gas (LNG) or liquified propane gas (LPG) carriers.
- —Special products tankers (chemical, wine, asphalt, sulphur).
- —Refrigerated (reefer) ships.
- —National Defense Reserve Fleet ships not designated for activation (especially World War II VICTORY ships).
- —Ferries, supply boats, harbor and oceangoing tugs, barges.
- —Coated tankers over 82,000 deadweight tons, and with beam greater than 106 feet.[1]
- —Uncoated tankers over 100,000 deadweight tons.[1]
- —Ships operating exclusively on the Great Lakes.

[1] The definition for militarily useful tankers has recently been expanded in: U.S. Department of Defense. 1985. DOD Sealift Tanker Study. Unpublished Report, Classified SECRET. This report has not been released.

Adapted from: U.S. Department of Defense. 1984. DOD Sealift Study. Unpublished report, Classified SECRET, 491 p.
Buck, R.V. (Captain) 1985. Personal communication. Deputy Director, Resources and Policy Evaluation, Office of the Assistant Secretary for Shipbuilding and Logistics, Department of the Navy, Washington, D.C.

criteria affect the number of commercial vessels considered useful for sealift.

Because of inescapable trends in changing ship types for the commercial trades, the Department of Defense has been faced with two options: building up a government-owned fleet of militarily useful vessels with little commercial usefulness in today's market; or developing methods of adapting modern commercial vessels for sealift and adapting sealift cargos to modern vessels. DOD is currently doing both. As the increasing size of crude oil carriers began to decrease their military usefulness, the dropping price of crude oil also began to diminish their economic usefulness. Many of the largest tankers are now laid The world orderbook for commercial newbuilding of all vessel

**Table 16.—Militarily useful, U.S.-owned vessels (as of July 1, 1985).**

**Oceangoing, 1,000 gross registered tons and over.**

| Fleet | Total Ships | Militarily Useful Ships[1] |
|---|---|---|
| **U.S. Flag** | | |
| Commercially owned | 482 | 351 |
| Government reserve | 290 | 264 |
| **Subtotal** | **772** | **615** |
| Registered Abroad | | |
| Effective U.S.-Control[2] | 364 | 93 |
| **Total, U.S.-Owned Fleet** | **1,136** | **708** |

[1] Cargo vessels deemed by the Military Sealift Command and the Maritime Administration to be useful for sealift of military supplies, equipment and fuels.

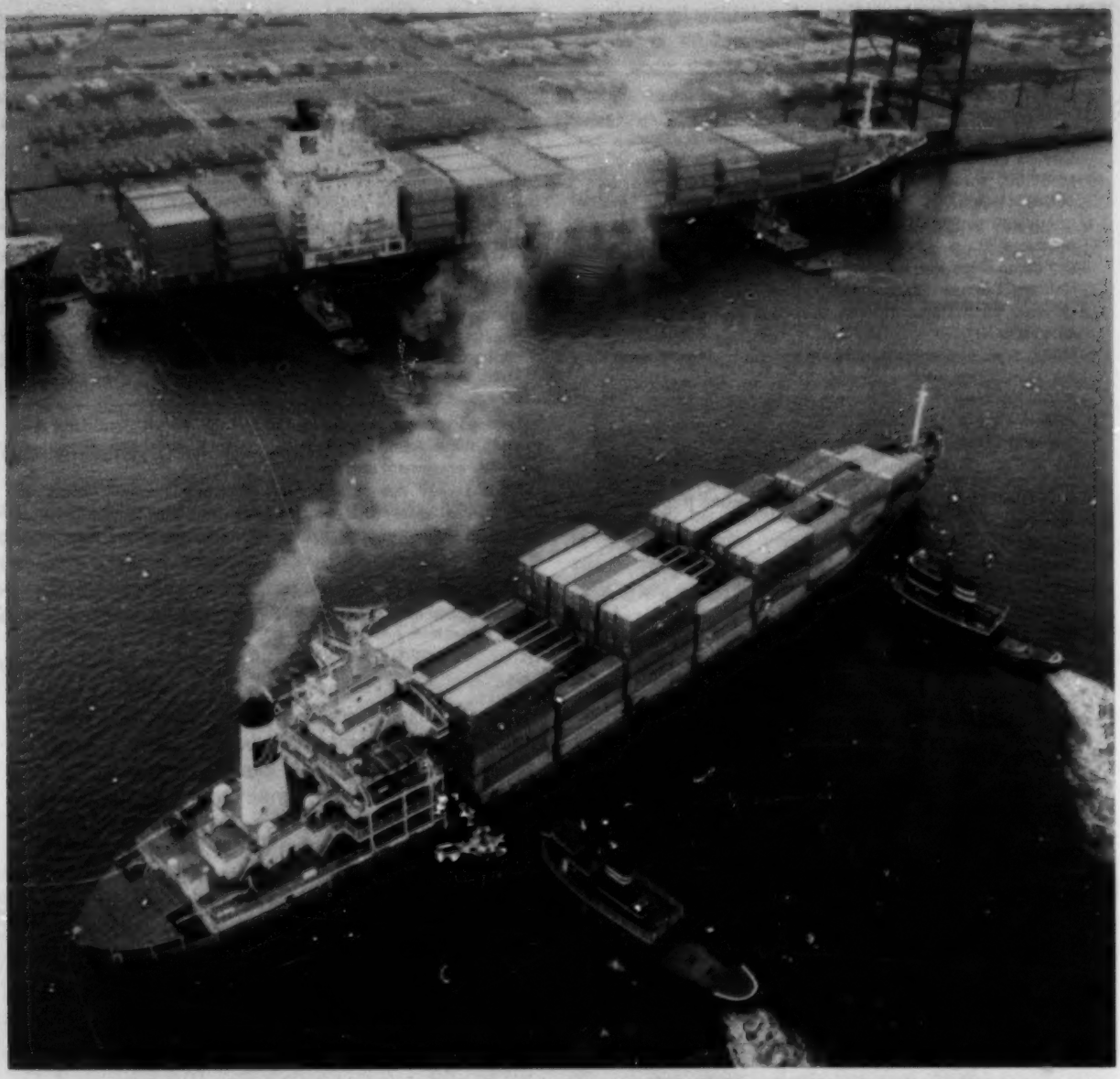
[2] U.S.-owned vessels registered in Liberia, Panama, Honduras and the Bahamas; the laws of these nations do not prohibit return of these vessels to the U.S. flag in case of a national emergency.

Source: Office of Policy and Plans. 1985. Personal communication. Maritime Administration, U.S. Department of Transportation, Washington, D.C.

types reflects this trend toward smaller ships: half as many oceangoing merchant vessels were on order in 1983 as in 1974, but the total carrying capacity they represented was only one-fifth as much tonnage (derived from figures in Rice, 1984). The Department of Defense is now planning to use uncoated tankers to carry some kinds of fuel (bunker-C, marine diesel) that would have to be sealifted to a conflict area, and this has increased the number of U.S.-owned tankers considered militarily useful. In addition, the Navy has initiated a major program to adapt containerships to carry outsized military unit equipment, because only about 25 percent of the required unit equipment could be carried in standard containers (Hamm, 1983).

Adaptation of commercial cargo aircraft for military airlift has been underway for some time. The Civil Reserve Air Fleet (CRAF) enhancement program funds $29 million per aircraft (of the B-747 size) to widen doors, strengthen decks and add tracks for military cargo loading in a national emergency; the costs include reimbursement to owners for revenue lost during modification and for increased operating costs (fuel and pilot pay are increased by the added weight) over a 12-year period.

For a comparable cost, tremendously more lift capacity would be provided by making modifications to merchant vessels. Over the past four decades, the Maritime Administration implemented a program of installing National Defense Features (NDF) in merchant vessels receiving Construction Differential Subsidy (CDS). Useful refueling-at-sea features were added



**A modern containership carries no onboard cranes for loading and off-loading. Cargo is "contained" in 20- to 40-foot long metal boxes of standard sizes that are easily transferred from ships to truckbeds and railbeds. Port facilities to support containerships include large shoreside cranes for loading and off-loading the containers. Container cargo operations are fast and not labor-intensive. Disadvantages that must be overcome for military use of these ships, however, are cargo restrictions imposed by standardized containers and alternate off-loading techniques for undeveloped ports.**

**Credit: Maritime Administration, U.S. Department of Transportation.**

to many new U.S.-flag tankers, but the Maritime Administration's efforts essentially ended with termination of CDS funding after FY 1981. The Navy has taken over this function under the name of Sealift Enhancement Features (SEF); a merchant vessel modification may include outfitting for later addition of such capabilities as secure (secret) communications, troopship "hotel" accommodations, refueling at sea, or special at-anchor offloading capability. Table 17 lists ship modifications in the SEF program. The Falklands War illustrated the need for more self-defense capability for merchant sealift vessels (Wettern, 1983; Villar, 1984), and additions of a self-defense package for U.S. sealift vessels is also underway. The SEF program is an excellent approach, because it provides the Nation with much more "ready" sealift assets, for the direct (and minimal) cost of reimbursing merchant ship operators for lost revenue, rather than providing subsidy for the active fleet or increasing the U.S. Government's investment in reserve fleets.

**Table 17.—Sealift Enhancement Features (SEF) for Merchant Vessels.**

**Productivity Enhancements**

—Modify containerships to carry heavy oversized equipment.
Install hard points and reinforce container cell guides to carry seasheds and flatracks; to install a stilt system to create a vehicle deck below containerized cargo; to accommodate 20-foot containers in cells designed for 40-foot containers; or to accept hotel service modules.

—Underway replenishment.
Install deck and hull fittings for stanchions, masts and sliding padeyes to allow underway transfer of dry cargo; install equipment to handle hoses and piping for alongside or astern discharge or acceptance of fuel underway.

—Deck and cargo hold modifications.
Install tie-down points for wheeled or tracked vehicles; install anchor/buoy handling; install crane to offload other vessels; reinforce holds to accept additional "tween decks" for wheeled vehicles; install foundations to construct a "deck" on tank tops or elevated over on-deck oil lines.

—Lighterage modifications.
Add deck and hull lashing points, bitts, rails to allow onboard carriage and alongside handling of lighters.

—Troopship configuration.
Convert existing hull compartments for troop berthing and hotel services spaces.

**Survivability Enhancements**

—Self-Defense features.
Install internal power, cables and communications; modify hull to accept self-defense equipment and install some (chaff defense systems) now.

—Damage control features.
Provide firehose mountings and firefighting equipment; construct at least one watertight bulkhead; replace non-shock-resistant materials.

**Operational Enhancements**

—Communications.
Install equipment and electrical/antenna couplings and mounts for regular and secure (classified/coded) communication systems.

—Lighting.
Install equipment, wiring and mounting for military lighting requirements.

Adapted from: Kesteloot, R.W. (Captain, USN). 1985. Personal communication. Director of Strategic Sealift, Office of the Chief of Naval Operations, U.S. Department of the Navy, Washington, D.C.
U.S. Department of Navy/Maritime Administration. 1985. (draft). National Defense Shipyard Study. Classified SECRET, 112 p.

## Sealift Improvements

Responding to the rapid decline of the U.S.-flag fleet and to predictions of a serious shortfall in dry cargo sealift for force projection, the Navy has been extremely active in the past few years in improving the Nation's sealift capacity. A new Strategic Sealift Division was formed in the Office of the Chief of Naval Operations to focus on the problem, and in March 1984, the Secretary of the Navy officially recognized Strategic Sealift as a major Navy function along with Sea Control and Power Projection (amendment to DOD Directive 5160.10). The Navy's budget for strategic sealift, in 1982, 1983 and 1984, was larger *each* year than the total level for all years since World War II (Kesteloot, 1984). More than $1 billion each year is planned over the next 5 years.

In FY 1985, the Department of Defense addressed several problems highlighted in the "DOD Sealift Study." The Army funded the Auxiliary Lighter Ship to provide critically needed additional prepositioning of equipment; the Navy funded the construction and conversion programs for MSC sealift and prepositioning ships (Table 18) and the addition of National Defense Features in all vessels of the Ready Reserve Force.

The President's budget for FY 1986 includes $1.3 billion for the Navy's Strategic Sealift program. In addition to continuation of the MSC ship program, it includes funds to buy suitable commercial vessels to be placed in the RRF, a number of improvements for the Marines' amphibious vessel offloading capabilities, and Sealift Enhancement Features for active commercial vessels.

Table 19 presents a brief overview of the FY 1986 budget for strategic sealift. Highlights of the planned program improvements include completion of the Maritime Prepositioning Ships, increased size of the RRF dry cargo fleet, and capability for 40 to 50 U.S.-flag containerships to carry outsized unit equipment.

The 13 Maritime Prepositioning Ships (MPS) will be organized in three strategically located squadrons, and each squadron will carry enough equipment and supplies to support a Marine Amphibious Brigade for 30 days of combat without further resupply.* The Ready Reserve Force now includes 75 ships, but DOD has long-range plans to increase to 100 dry cargo vessels and possibly 16 to 50 tankers. These vessels will be purchased from the U.S.-flag commercial fleet.

The containership modification will be accomplished through "seasheds" and "flatracks." Seasheds are over-sized, open-topped containers with motorized hinge-opening floors; flatracks are topless and sideless "containers," essentially large and heavy pallets. Both allow flexibility in organizing stowage space for non-containerizable cargo, much as a breakbulk vessel would. The long-range plan is to purchase and store about 2,000 seasheds and 7,000 flatracks, enough to convert 40 to 50 containerships. Minor modifications will be made now to about 100 U.S.-flag containerships (strengthening hull structure and the vertical cell guides that hold containers), and the 50 ships

* A Marine Amphibious Brigade to be supplied by the Maritime Prepositioning Ships includes about 15,000 personnel, 79 fixed wing and 68 rotary wing aircraft, over 100 amphibious assault vehicles, over 50 tanks and other supporting combat equipment (Stewart *et al.*, 1984).

**Table 18.—Military Sealift Command Vessels for Maritime Prepositioning and Strategic Sealift.[1]**
**Description and Purpose.**

| Ship type[2] | Number | Description and Purpose |
|---|---|---|
| TAKX | 13 | Auxiliary Cargo-Special—Maritime Prepositioning Ships (MPS). Five new and 8 conversion. Self-unloading, combination container, RO/RO, products tanker, with helo deck and lighterage barges. Leased by the Military Sealift Command from private operators. |
| NTPF | 18 | Near-Term Prepositioned Force—now Prepositioning Force Ships. Fleet of chartered, unmodified commercial vessels, crewed by civilians and loaded with supplies for Marine, Army, Air Force, and Navy. In Mediterranean (1) and Indian Ocean (17). |
| TAKR | 8 | Auxiliary Cargo—Rapid. Fast Sealift Ships. 33-knot containerships bought from Sea-Land (SL7s), converted to self-unloading, with roll-on/roll-off (RO/RO) capability for military vehicles. Unarmed, with civilian crew. For transport of the Rapid Deployment Force. |
| TAVB | 2 | Aviation Support. Converted merchant vessels to support the maintenance of aircraft of a Marine Amphibious Brigade. |
| TAH | 2 | Auxiliary Hospital. Each with 12 operating rooms, 1,000 beds. |
| TACS | 11 | Auxiliary Crane Ship. Merchant vessel conversions, fitted with large computerized cranes to offload non-self-sustaining containerships in austere port locations. |

[1] Does not include vessels of the Military Sealift Command used for oceanographic surveying, salvage or cable-laying.
[2] The ship type designators beginning with T are collectively known as the Navy's "T"-ship program; all are being constructed or converted in U.S. shipyards. The "T" designator derives from the time when the Military Sealift Command (MSC) was known as the Military Sea Transport Service (MSTS), and its vessels were all designated "T" ships for "transport."

Source: National Advisory Committee on Oceans and Atmosphere. 1985. Washington, D.C.

most readily available at mobilization will be fitted quickly with the stored sheds and racks. This will decrease ship conversion time and shipyard workload during mobilization.

The Navy's strategic sealift budget reflects a balanced program, with several simultaneous approaches to decreasing the shortfall in dry cargo sealift capacity reported in the "DOD Sealift Study":

- Increased maritime prepositioning through the Maritime Prepositioning Ships and continued operation of the Prepositioning Force Ships.
- Increased government-owned sealift assets through conversion of the Fast Sealift Ships and the increased size of the RRF fleet.
- Increased reliance on modern commercial vessels through Sealift Enhancement Features and the containership seashed/flatrack program.

## Cost Comparisons

NACOA has reviewed the costs of these different approaches. The total construction and conversion costs for MSC's 13 Maritime Prepositioning Ships and 8 Fast Sealift Ships will be almost $3 billion (Holloway, 1983). Capital costs (construction and conversion) for the prepositioning ships will average $184 million per vessel, with annual charter costs per ship of $15 million. Acquisition and conversion of the Fast Sealift Ships will average $110 million per vessel, with annual "operating" costs in a reduced operating status of roughly $1 million per ship (Dubuque, 1985). Recent vessel purchases for the Ready Reserve Force included 19 ships for $30 million in 1984 and 11 ships for $82 million in February 1985, averaging less than $4 million per vessel, but typical maintenance costs for each RRF ship are about $600,000 per year and $1.5 million every 5 years for an activation test, giving average annual maintenance costs of almost $1 million per vessel. At roughly $157,000 per self-operating seashed and $14,000 per flatrack, the 2,000 seasheds and 7,000 flatracks now planned will cost $412 million to outfit about 40 to 50 containerships (Kesteloot, 1984, 1985a), an estimated cost of roughly $10 million per ship. Annual operating costs of this program will be minimal, including land storage costs for the sheds and racks and possibly reimbursement to the ship operator for any decreased efficiencies that might be caused by modifications to the ship. Table 20 summarizes the approximate cost comparisons.

Simple cost comparisons of this type are not adequate, because it is also necessary to compare other values of each approach. This requires balancing costs, carrying capacity, flexibility, and most especially timeli-

**Table 19.—President's Fiscal Year 1986 Proposed Budget for Strategic Sealift.**

| Program Description | Acquisition, Construction or Conversion | Operations and Maintenance |
|---|---|---|
| | ---Millions of dollars--- | |
| Maritime Prepositioning Ships[1] | | |
| Auxiliary Cargo-Special (TAKX) | —— | 404.7 |
| Prepositioning Force | —— | 169.5 |
| Strategic Sealift Surge Ships[1] | | |
| Fast Sealift (TAKR) | —— | 27.4 |
| Aviation Support (TAVB) | 30.9 | 8.0 |
| Auxiliary Hospital (TAH) | 19.9 | 0.5 |
| Auxiliary Crane Ship (TACS) | 84.9 | 2.2 |
| Ready Reserve Force | 203.4 | 85.2 |
| Troopship (U.S. Marine Corps Assault Force Follow-on) | —— | 2.0 |
| Charter Termination Liability[2] | —— | 76.2 |
| Amphibious Offload Equipment | | |
| Elevated causeway (a transportable pier) | 12.9 | —— |
| Causeway sections (floating cargo bridge) | 24.4 | —— |
| Side-loading tugs (floating work platforms) | 18.0 | —— |
| Commercial offshore POL[3] discharge system | 14.0 | —— |
| Fore and aft moorings | 2.6 | —— |
| Offload systems for RO/RO[4], LASH[5], and container ships | 3.2 | —— |
| Amphibious Offload Spares | 1.9 | —— |
| Sealift Enhancement Features (SEF) | | |
| Seasheds | 30.4 | —— |
| Flatracks | 10.3 | —— |
| Combined other SEF | 26.5 | 10.0 |
| **Subtotals** | **483.3** | **785.7** |
| **Combined Total** | **1.27 billion** | |

[1] See Table 18 for ship descriptions.

[2] The Navy is required to budget for a portion of its liability should it be forced to terminate long-term vessel charter contracts.

[3] Petroleum, oil, and lubricants.

[4] Roll-on/Roll-off; a cargo vessel for transport of wheeled or track vehicles.

[5] Lighter Aboard Ship; a cargo vessel carrying its own barges for cargo offloading.

Derived from: Kesteloot, R. W. (Captain, USN). 1985. Sealift and Maritime Prepositioning Programs, FY86-87, President's Budget FY86. Unpublished paper.

ness. Airlift to ensure rapid availability of equipment and supplies would be prohibitively expensive; land-basing of these supplies would limit geographic flexibility and might be comparable in cost to maritime prepositioning and fast sealift. Defense and environmental protection costs of land-based stores in Southwest Asia would be high. Maritime prepositioning, while comparatively expensive, is necessary for the earliest parts of a conflict. Timeliness, up to a point, outweighs costliness. Similarly, rapid deployment of sizeable forces requires fast and dedicated shipping.

The next two approaches offer very similar benefits: RRF vessels are in 5- or 10-day readiness status, and call-up and loading time for premodified containerships would be similar. NACOA supports the approach of adapting modern, active commercial vessels to military purposes, because maintenance costs are borne by the operator in trade; the vessel provides training (and jobs) for U.S. crew, and the ship would have a ready crew if it were called up for service. In the long run, NACOA believes this is a more efficient and less costly alternative than building, acquiring or preserving an outmoded fleet. Costs of the seashed/flatrack conversion are relatively high, however. Industry representatives at a recent government-sponsored conference on strategic sealift asserted that this concept could be implemented at substantially lower cost. W.B. Hubbard of American President Lines suggested that commercial flatracks stacked over the vessel tank tops on "stilts" might be a much lower cost alternative (U.S. Department of the Navy/Maritime Administration, 1984b). NACOA understands that, at the direction of Congress and the Small Business Administration, the FY 1985 procurement of seasheds was not competitive but was allocated to a small and disadvantaged business; the 1986 purchase will be competitively bid. We also understand the Naval Sea Systems Command is seeking to improve the design of both seasheds and flatracks to increase reliability and reduce costs. NACOA supports the concept of modifying containerships to carry outsized military equipment, but the Committee believes the possibilities of a more cost-effective approach should be fully explored before further purchases of seasheds and flatracks are made.

Although surplus commercial vessels are available for the RRF at extremely low purchase prices during the current shipping recession, annual maintenance would soon raise vessel costs to a level comparable to that of the containership modification approach. The Department of Defense recently received a proposal (Christie, 1985) from a private firm asserting that a commercial operator of an active merchant vessel could provide a cost-effective alternative to government purchase and maintenance of reserve fleet ships, if the government would pay a package of costs:

- The Sealift Enhancement Features.
- The cost differential of constructing to U.S. Coast Guard vessel standards (more stringent than foreign-flag requirements).
- The ad valorem tax on foreign shipyard maintenance and repair.
- The operating cost differential between Korean and Northern European rates (a modified ODS contract acknowledging that European labor rates

**Table 20.—Cost Comparison of Sealift Approaches.**

| Approach | Fleet | Acquisition, Construction or Conversion Cost/Vessel | Annualized Operating Cost/Vessel |
|---|---|---|---|
| | | ----------*Millions of dollars*---------- | |
| Prepositioned | Maritime Prepositioning Ships | 184[1] | 15[2] |
| Rapid deployment | Fast Sealift Ships | 110 | 4[3] |
| Government reserve sealift | Ready Reserve Force | 4 | 1[4] |
| Modified commercial sealift | Private | 10 | minimal |

[1] Maritime Prepositioning Ships (MPS) have been constructed and converted by private shipowners under agreements that the vessels will be chartered for 25 years by the Military Sealift Command. Owners will be reimbursed for capital costs of the vessels through "capital hire rates" included in the annual charter fees. The annualized fees will include interest at the prevailing rate, but cost listed in the table is base capital cost averaged for 13 MPS vessels built and converted.

[2] Annual operating costs paid by Military Sealift Command through charters to private operators.

[3] Annual operating costs for vessels in reduced operating status.

[4] Average annual cost, considering cost of activating each vessel every 5 years.

Derived from: Dubuque, R.S. 1985. Personal communication. Budget Director, Military Sealift Command, U.S. Department of the Navy, Washington, D.C.
Kesteloot, R.W. (Captain, USN). 1985a. Personal communication. Director of Strategic Sealift, Office of the Chief of Naval Operations, U.S. Department of the Navy, Washington, D.C.
1985b. Sealift and Maritime Prepositioning Programs, FY86-87, President's Budget FY86. Unpublished paper.

Source: National Advisory Committee on Oceans and Atmosphere. 1985. Washington, D.C.

are lower, and more reasonable, than are present U.S. costs).

Without judging the efficacy of this particular proposal, NACOA believes all efforts should be made to examine and encourage any reasonable proposal that will keep U.S.-flag merchant vessels and their crews active.

## Summary

Given present Navy planning, the situation by 1988 to 1990 will be one of increased government-controlled shipping dedicated to the needs (troop transport, equipment, and unloading support) of the Army's Rapid Deployment Force and three Marine Amphibious Brigades; all ships of the Military Sealift Command and Ready Reserve Force will have National Defense Features installed before mobilization; about 100 containerships will be pre-modified so that the most readily available 40 or 50 can immediately be fitted with seasheds and flatracks for carrying military unit equipment; all U.S.-flag commercial vessels deemed convertible to military uses will have other Sealift Enhancement Features preinstalled; and the National Defense Reserve Fleet will be smaller and more ready but will not be required in the early stages of overseas sealift.

The cumulative effect of these changes is greatly enhanced sealift capacity that is substantially more "ready." As a result, considerably fewer shipyard resources will be required for mobilization. NACOA has therefore examined the resultant requirements for the U.S. shipyard mobilization base.

# Chapter 3
# Shipyard Mobilization Base: The Defense Need for Shipyards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# CHAPTER 3
# Shipyard Mobilization Base: The Need for Shipyards

## Mobilization Needs, Past and Present

In a major mobilization, heavy and diverse demands are placed on the workers and facilities of the peacetime shipyard base. Mobilization demands include the following (although not necessarily in priority order):

- Accelerated completion of construction, conversion and repair of Navy and merchant vessels in progress.
- Rapid activation of Ready Reserve Force vessels, requiring several days of shipyard work but no dry-docking.
- Rapid conversion of active and inactive commercial vessels for sealift purposes.
- Activation of mothballed combatant vessels, the "Inactive Ships in Naval Custody" (ISNAC).
- Battle damage repair of Naval and merchant vessels.
- Routine maintenance of Naval and merchant vessels.
- Construction of new Naval and merchant vessels to replace those lost in battle.

Past experience of World Wars I and II demonstrated that peacetime shipping assets and shipyard capacity were far from adequate to meet mobilization needs. The national maritime policy, embodied in the Merchant Marine Acts of 1920 and 1936, as amended, has for over half a century provided Federal supports to the shipping and shipbuilding industries to preserve sufficient capacity in peacetime to respond to a national defense emergency.

The United States was unprepared for the first World War, and launched a major shipbuilding program that required a great expansion of the shipyard base, including one new yard established with 50 building ways for "mass production" of ships. The building program eventually produced almost 2,000 new merchant vessels, totalling about 14 million dwt, intended to create a "bridge of ships" to sealift troops and their supplies across the North Atlantic to Europe (Lane, 1951); however, only 6 percent of the vessels contracted for during the war building effort were actually delivered before the Armistice.

World War II shipbuilding was begun well before U.S. entry into that conflict. The Maritime Commission, established by the 1936 Merchant Marine Act, had just begun its 500-ship building program in 1938, but accelerated the program when war began in Europe. From 1939 to 1945, private U.S. shipyards built 5,171 merchant vessels, totalling 54.7 million dwt. This tremendous newbuilding rate was necessary, because U.S. merchant sealift vessels were being sunk at a rate of over half a million tons a month in early 1942, and newbuilding did not exceed sinkings until late in that year (Lane, 1951). In the same time period, 1,556 Naval vessels totalling 4.7 million light displacement tons were built (Lane, 1951), 70 percent of them in private U.S. shipyards. Also, from 1942 to 1945, there were 67,902 merchant and government vessel repairs and conversions in private shipyards. Steel use for the shipbuilding and ship repair industries rose from a pre-war average of about 1 percent to 16-20 percent of total national steel use during the peak war years (Fassett, 1948).

Several major World War I yards had fallen into such disrepair in the post-World War I shipbuilding depression that the Maritime Commission decided to build new shipyards rather than to reactivate the old ones. Where possible, valuable waterfront property was purchased by the government; in many cases, however, the government exercised its power of eminent domain and condemned property to obtain it quickly (Lane, 1951). The Navy and Maritime Commission invested $851 million in new and expanded private yards and almost $1 billion on expanding Navy yards. Seven of the shipyards currently in the Active Shipbuilding Base received, at that time, at least $5 million each in government investment; two were owned outright by the government (Fassett, 1948).

Since World War II, there have been no major demands on the shipbuilding industry requiring a great expansion of capacity, and, indeed, many of the shipyards activated for World War II have since closed. The Korean conflict prompted a Federal shipbuilding program of only 35 merchant vessels. For the Vietnam conflict, 150 vessels of the National Defense Reserve Fleet were activated, but the buildup of U.S. involvement in Vietnam was so gradual that no significant burden was placed on U.S. shipyard capacity.

The United Kingdom's rapid mobilization for the Falklands War included 50 conversions of merchant vessels done within 3 months. This work was accom-

plished in only six shipyards. Plans existed ahead of time for conversion of only one class of ship used (Hamm, 1983), and all other design work for conversion was done extremely quickly, sometimes within 2 or 3 days (Villar, 1984). Although some conversions included major work—such as addition of helicopter decks, troopship and hospital ship accommodations, and even extra watertight bulkheads—the average shipyard time for conversion was only 6½ days (derived from data in Villar, 1984).

The spectre of another major global conflict, or of a substantial U.S. action not involving or not supported by our allies, continues to raise the argument that excess shipbuilding capacity must be preserved in the national defense interests of our Nation.

## The Defense Studies—SYMBA and NADES

The U.S. Navy and the Maritime Administration collaborated on a study of the shipyard capacity required for a major mobilization. The resulting Shipyard Mobilization Base (SYMBA) Study was completed in 1984. For the most part, it used the same defense planning scenario as the previously described set of sealift studies—mobilization for a global, non-nuclear, three-theater, 3-year conflict—and modeled mobilization based largely on the timing and quantity of sealift requirements outlined in the "DOD Sealift Study."

### The "Shipyard Mobilization Base (SYMBA) Study"

The SYMBA Study defined a shipyard mobilization base as those yards able to build or drydock vessels over 400 foot length (71 yards) or to do at least topside repair to vessels over 400 foot length with up to 12 foot draft (48 yards). The 400-foot cutoff was to accommodate the World War II VICTORY ships in the National Defense Reserve Fleet. The resulting SYMBA base included the 9 public shipyards and 110 private shipyards. The 119 yards of the SYMBA base include about 90 percent of the skilled "production" workers and the major facilities in the U.S. shipbuilding industry. The study modelled the priority, timing and number of vessels requiring activation, conversion, repair and construction, and examined the adequacy of shipyard facilities and workers in the SYMBA base for these tasks.

Given the study assumptions (see page 43) and the presumed mobilization workload, the SYMBA Study reaches the following conclusions:

- An absolute minimum of facilities needed for the projected workload in the first year of mobilization is 51 building positions, 41 graving docks and 56 floating drydocks.
- Of the 110 private yards in the SYMBA base, 24 are needed only for activations, and 28 are not needed after the initial mobilization.
- Timely activation of some Ready Reserve Force vessels requires "outporting" them close to activation sites.
- Mobilization work—activating reserve vessels, converting commercial vessels—is not constrained by the number of facilities or workers, but new ship construction later in the conflict is facilities-constrained.
- At "D-day," 165,000 production workers are required (30,000 of them for activation work); the peak demand is 225,000 production workers about halfway through the 3 years, requiring a 2-percent per month growth in the number of workers.

The SYMBA Study concludes that shipyard facilities existing as of October 1982 were more than adequate for a future major mobilization, although there might be some temporary shortfalls in numbers of skilled shipyard workers, but that Navy peacetime work alone "would not sustain an adequately diversified base." Given the mobilization requirements assumed in the study, and expected declines in shipyard capacity, some minor mobilization delays were expected because of a lack of skilled workers.

The SYMBA Study results appeared publicly in a letter from the Navy (Prince, 1984) to the Georgetown Center for Strategic and International Studies (CSIS) commenting on a draft CSIS paper forecasting trends in the U.S. maritime industries. Andrew Prince, Deputy Assistant Secretary of the Navy for Sealift and Maritime Affairs, wrote:

> *We have considered the economic situation of the shipbuilding and repair facilities in this country, and we have determined that our current resources do enable us to meet our national security requirements. Our mobilization studies have pointed out areas where unnecessary delays and bottlenecks during crisis periods may occur. These analyses have assisted us in preparing programs and redirecting resources to reduce lead times and raise the availability of ships for military deployments—all within currently projected industrial capacities.*

and on the subject of skilled shipyard labor he wrote:

> *As far as having a declining, readily available labor force possessing the requisite skills to be immediately employable during a crisis or mobilization period, there exists a substantially large reserve labor pool which can be tapped. The huge number of "on file" employment applications attests to this fact. These applications are mainly production workers, ready and willing to go back to work at their "real" trade of being a shipbuilder—regardless of their current occupation or geographic location (Prince, 1984).*

Conversations with labor leaders (Sullivan, 1984; Batson, 1984) indeed confirmed that workers laid off by a shipyard largely stay in the area and return to work at the yard when its workload and labor needs increase. The mothballed Naval shipyard at Long Beach, California was reactivated in 1951 because of the Korean conflict, and recruited 4,000 workers from all over the Nation within 3 months (Sonenshein, 1985). In World War II, the total U.S. employment in the shipbuilding and ship repair industries rose extremely rapidly from 236,000 in 1941 to 760,000 in 1942 and to a peak of 1,340,000 in 1943.

NACOA's review focussed on several assumptions in the SYMBA Study which significantly affected the conclusions drawn by the Department of Defense. Specifically, these assumptions increase the shipbuilding capacity required for a major conflict above the level NACOA believes would actually be needed.

- The shipyard workweek is not lengthened before "D-day."
- Triple-shifting of shipyard workers is not accomplished until 7 months into the conflict.
- Work already in the yard is accelerated to free up facilities, but ongoing peacetime work is not interrupted.
- All vessels of the National Defense Reserve Fleet and the Inactive Ships in Naval Custody are activated although current mobilization plans do not call for this.
- Activation work includes the addition, in early mobilization, of National Defense Features or Sealift Enhancement Features on all vessels of the Ready Reserve Force, the Military Sealift Command, the National Defense Reserve Fleet and the commercial merchant fleet.
- No new ship construction is done in available floating dry-docks, although simple sealift ship construction could be, if necessary, and virtually none is done in public yards.
- No new shipyard capacity is added throughout the entire conflict.

Although the October 1982 SYMBA base had been judged adequate by the Department of Defense—and considerably more than adequate by NACOA—to meet the Nation's shipyard needs in a major conflict, shipyards in the SYMBA base were closing in 1983 and 1984 due to lack of work. Official updates of the defense shipbuilding capacity (Pross, 1984; Karlson, 1985) show that between October 1982 and June 1985, 20 of the 110 private shipyards in the SYMBA base had temporarily or permanently closed (Table 11). In the same period, only one shipyard, North Florida of Jacksonville, was added to the SYMBA base. Because of this trend, a refinement of the SYMBA Study was commissioned to evaluate the ability of a much smaller shipyard base to accomplish early mobilization tasks. This follow-on effort, the "National Defense Shipyard (NADES) Study," was begun in late 1983.

## The "National Defense Shipyard (NADES) Study"

The NADES Study (U.S. Department of the Navy/ Maritime Administration, 1984 draft, unpublished) has not been released, but NACOA was given an opportunity to review a final draft. The NADES Study replaces the part of the SYMBA Study that models the first 8 months of mobilization; NADES thus addresses only the early activation and conversion requirements, and not the newbuilding required later in a conflict. The SYMBA report addresses newbuilding and other shipyard requirements after initial mobilization and is still valid for months 9 to 36 of a major conflict. The National Defense Shipyard base comprises a smaller group of private shipyards projected to be still available in 1988 to 1990 based upon: future military shipbuilding and ship repair work, an estimate of commercial ship repair (no commercial newbuilding is assumed), and historical requirements for yards in large port areas. The NADES base comprises the 9 public yards and only 57 private shipyards; 29 of the NADES yards are considered major yards with facilities for building or drydocking a vessel over 475 feet in length.*

NACOA focussed its review on major differences in the assumptions of the NADES and SYMBA Studies that contributed to different conclusions about requirements for shipyard capacity in the early stages of mobilization (Table 21):

- Earlier warning and partial mobilization before the onset of hostilities (10 days more pre-mobilization time than in SYMBA).
- Earlier increase in length of the shipyard workweek.
- Low-priority work interrupted for high-priority mobilization tasks.
- Smaller numbers of low readiness military and merchant reserve vessels activated in early stages of mobilization.
- Activation workload is reduced based on Navy programs that have improved sealift readiness of reserve and active U.S.-flag vessels.

The NADES Study concludes that projected peacetime employment would be adequate for early mobilization and that facilities in the smaller NADES base would be more than adequate for mobilization, with peak facility use averaging less than 55 percent for major building positions and drydocks. Additional facilities might be required for new construction later in the

* The NADES Study uses 475-foot vessel capability to define a "major" yard (rather than the 400-foot capability used in SYMBA) to conform to the Maritime Administration's peacetime definition of major shipyards. (See page 18.)

**Table 21.—Comparison of Assumptions.**
**Shipyard Mobilization Base (SYMBA) and National Defense Shipyard (NADES) Studies.**

| Assumption | SYMBA | NADES |
|---|---|---|
| Time period modelled[1] | Pre-mobilization and entire 3-year conflict | Premobilization and first 8 months of conflict |
| Activities modelled | Mobilization, battle damage, newbuilding | Mobilization, battle damage, no newbuilding |
| Shipbuilding base used<br>—yards (includes 9 public yards)<br>—production workers (public and private) | October 1982, existing<br>119 yards<br>164,000 | October 1988, projected<br>66 yards<br>140,000 |
| Conflict warning time | Not releasable | Additional 10 days |
| Shipyard workweek lengthened | At D-day | Before D-day |
| Interrupt low-priority shipyard work | No | Yes |
| Expand shipyard facilities | No | No |
| Ships not requiring shipyard activation work | Near-Term Prepositioned Fleet (7 ships) | Prepositioning ships (17),<br>Maritime Prepositioning Ships (13),<br>Fast Sealift Ships (8) |
| Shipyard activation work required | Small Ready Reserve Force requiring less than 5 days each.<br>All other National Defense Reserve Fleet requiring 20-61 yard days each. | Larger Ready Reserve Force requiring less than 5 days each.<br>Few other National Defense Reserve Fleet[2] |
| Shipyard conversion work required | Long yard times to convert commercial vessels to sealift use. | All government-controlled merchant ships are programmed to have conversion work done in peacetime. |

[1] The SYMBA Study modelled the shipyard needs during an entire 3-year global conflict; the NADES Study applied different assumptions to the mobilization phase of the conflict and remodelled the first 8 months.

[2] Almost all of the older vessels in the National Defense Reserve Fleet will be activated only if needed to replace sealift ships that have been sunk, or if needed to replace ships taken out of domestic trade for overseas sealift.

Derived from: U.S. Department of the Navy/Maritime Administration.
1984. Shipyard Mobilization Base Study. Unpublished report, Classified SECRET, 153 p.
1985. (draft). National Defense Shipyard Study. Classified SECRET, 112 p.

Source: National Advisory Committee on Oceans and Atmosphere. 1985. Washington, D.C.

conflict, but shipyard facilities could be expanded to meet this need. Mobilization requires the initial availability of 142,000 production workers, peaking to 157,000 in the eighth month. The basic conclusion of the draft NADES Study, as summarized in the transmittal letter received by NACOA, is that:

> *The shipbuilding and ship repair industry of the U.S. has adequate capacity and capability to accomplish the present and planned programs of the Department of Defense. Navy work alone, is not likely to sustain the entire nation's shipbuilding base for mobilization, but little intervention is presently required to have reasonable assurance that we can meet the initial mobilization requirements through 1990.*

NACOA has been briefed on the assumptions and conclusions of the SYMBA and NADES Studies, and concludes that the NADES Study assumptions concerning early mobilization are more reasonable than those of SYMBA, and that NADES accurately reflects reduced shipyard mobilization requirements derived from recent Department of Defense programs to improve sealift readiness. Sealift enhancement programs planned by the Navy may well reduce even further the mobilization requirements for shipyard workers. After reviewing modified mobilization plans and wartime planning scenarios through the 1990s, NACOA concurs with the NADES conclusion that a substantially reduced private U.S. shipyard base would be adequate to meet mobilization needs.

## NACOA Review of Shipyard Surge Capacity

After receiving a classified briefing on the SYMBA Study, NACOA initiated an informal inquiry into shipyard surge capacity—the capacity to expand new ship construction in a major conflict. The NACOA review was prompted by questions about some of the SYMBA Study assumptions on the buildup of shipyard workers, addition of extra shifts, and the expansion and use of facilities in a major mobilization.

NACOA contacted selected major shipyards currently doing military construction and conversion work, and requested specific information. We focussed on new ship construction, rather than on activation work

or battle damage repair, because the latter would vary so much from ship to ship, and potential increases in newbuilding capacity would be easier to quantify. Any one measure of shipyard surge capacity taken alone can be misleading—yard productivity does not rise linearly with addition of more workers, for instance, and tonnage produced depends on the complexity of the vessel type being built—so NACOA requested information for three capacity measures, under three or four different situations.

The three measures chosen were the number of shipyard workers, steel throughput, and vessel tonnage produced. The different situations addressed were present conditions, actual conditions during a past peak production period, estimated peak capacity in peacetime conditions, and estimated future surge capacity under full wartime conditions. Table 22 describes more fully the information requested for this review. Ten shipyards were contacted informally and requested to provide rough estimates of the measures outlined; the following nine shipyards complied with the request:

| | |
|---|---|
| Avondale | Lockheed Shipbuilding |
| Bath Iron Works | National Steel and Shipbuilding Company (NASSCO) |
| General Dynamics—Electric Boat | Todd—Los Angeles Division |
| General Dynamics—Quincy | Todd—Seattle Division |
| Litton—Ingalls | |

Newport News Shipbuilding declined to supply information for reasons of protecting proprietary business information. Indeed, a number of the yards that did contribute were concerned about the national security or business sensitivity of the information, so it was agreed that shipyard capacity measures for individual yards would not be shown.

Under the wartime scenario, sufficient time was allowed to reach full employment. Although shipyard facilities would certainly be expanded in wartime, we asked for estimates of wartime production increases within the constraints of present facilities. Maximum peacetime building capacities were reached in several months; the much larger wartime maximum capacities were reached within a year or two. When estimating maximum steel throughput and ship tonnage completions, each yard was asked to estimate the ship type or ship mix for which it would likely receive orders under both peacetime and wartime conditions. Most yards assumed a ship mix similar to their workload today, but in many cases gave a range of steel throughput and building capacity assuming different extremes of ship complexity.

Table 23 summarizes the results of the NACOA inquiry. Present values, totalled for all nine yards, represent 1984 conditions. Several of the yards agreed to provide information only if it were shown in aggregate with values from the other yards. Aggregate capacity is not really meaningful for a small sample of yards, however, especially with the Nation's largest shipyard

**Table 22.—Information Requested for NACOA Review of Shipyard Surge Capacity.**

**Measures**

*Shipyard workers - total.*
Total shipyard workers, because various yards include different skills in their definition of "production" workers.

*Steel throughput - long tons/month.*
Maximum steel fabrication capacity of each yard regardless of constraints on finishing or outfitting vessels. During wartime construction, vessel modules could be fabricated in one yard and transported to another facility for assembly and outfitting.

*Vessel tonnage - light displacement or deadweight tons.*
Total tonnage of vessels constructed and outfitted. Present vessel construction is mostly combatants, and some specialized cargo vessels being built and converted for Military Sealift Command. Peacetime and wartime projections of tonnage output are based on reasonable assumptions of what type of vessels would likely be ordered in each yard under each condition.

**Conditions**

*Present.*
Actual conditions in each shipyard for 1984; total workers is given for December 1984 or January 1985, steel throughput based on monthly average for the year.

*Actual past peak.*
Where possible, World War II conditions were obtained; for yards with greatly expanded facilities in World War II, figures were obtained only for the portion of facilities still existing. Where wartime records were not available; figures are given for a peacetime peak production year.

*Estimated peacetime maximum.*
Most shipyards estimated peak capacity assuming an increase in available commercial shipbuilding work. Results illustrate how far below full capacity the yards are working under present peacetime conditions.

*Wartime surge capacity.*
Wartime capacity was not requested, because of differing assumptions on how to proceed under full mobilization. Four yards provided these figures, however, along with their assumptions.

Source: National Advisory Committee on Oceans and Atmosphere. 1984. Washington, D.C.

not included, and because not all yards provided measures in all categories. Therefore, values are presented only as average increases from the present. Percentage increases for each measure were calculated for each yard, and the average increase over present conditions is shown for each measure in the table. Values in Table 23 are derived by holding each yard's ship mix for each scenario comparable to work in that yard today; this allows the most direct comparison of shipbuilding capacity under different conditions.

Although this review is admittedly cursory, based on a small sample of yards and on imprecise assumptions and analyses, the results nevertheless suggest some interesting findings. The shipyards' estimates of their maximum capacity, if fully employed under peacetime conditions, suggest they are currently

**Table 23.—Mobilization Capacity in Selected Private Shipyards.[1]**

| Capacity Measure | Present Total | Past Peak | Peacetime Maximum | Wartime Surge |
|---|---|---|---|---|
| | | Average Increase | | |
| Shipyard Workers (total employment) | 63,600 | 247% | 151% | 223% |
| Steel throughput (long tons/month) | 11,600 | 528% | 211% | 882% |
| Vessel tonnage finished (ldt or dwt/year)[2] | 173,700 ldt plus 79,000 dwt | 386% | 317% | 666% |

[1] Avondale Shipyards, Inc.; Bath Iron Works Corporation; Electric Boat Division, General Dynamics Corporation; Quincy Shipbuilding Division, General Dynamics Corporation; Ingalls Shipbuilding Division, Litton Systems, Inc.; Lockheed Shipbuilding Company; National Steel and Shipbuilding Company; Los Angeles Division, Todd Shipyards Corporation; Seattle Division, Todd Shipyards Corporation.

Note: Some of the data provided are considered by the shipyards to be confidential, so values for individual yards cannot be shown. Data for the "present" are totalled for all nine shipyards. Not all yards responded with information in all of the other categories, however, so totals of the other measures would be misleading. Therefore, increases over present values are calculated for each yard that responded in each category, and the increases are averaged using all yards that responded.

[2] Light displacement tons or deadweight tons.

Source: Information provided to the National Advisory Committee on Oceans and Atmosphere by selected private shipyards listed above. 1984.

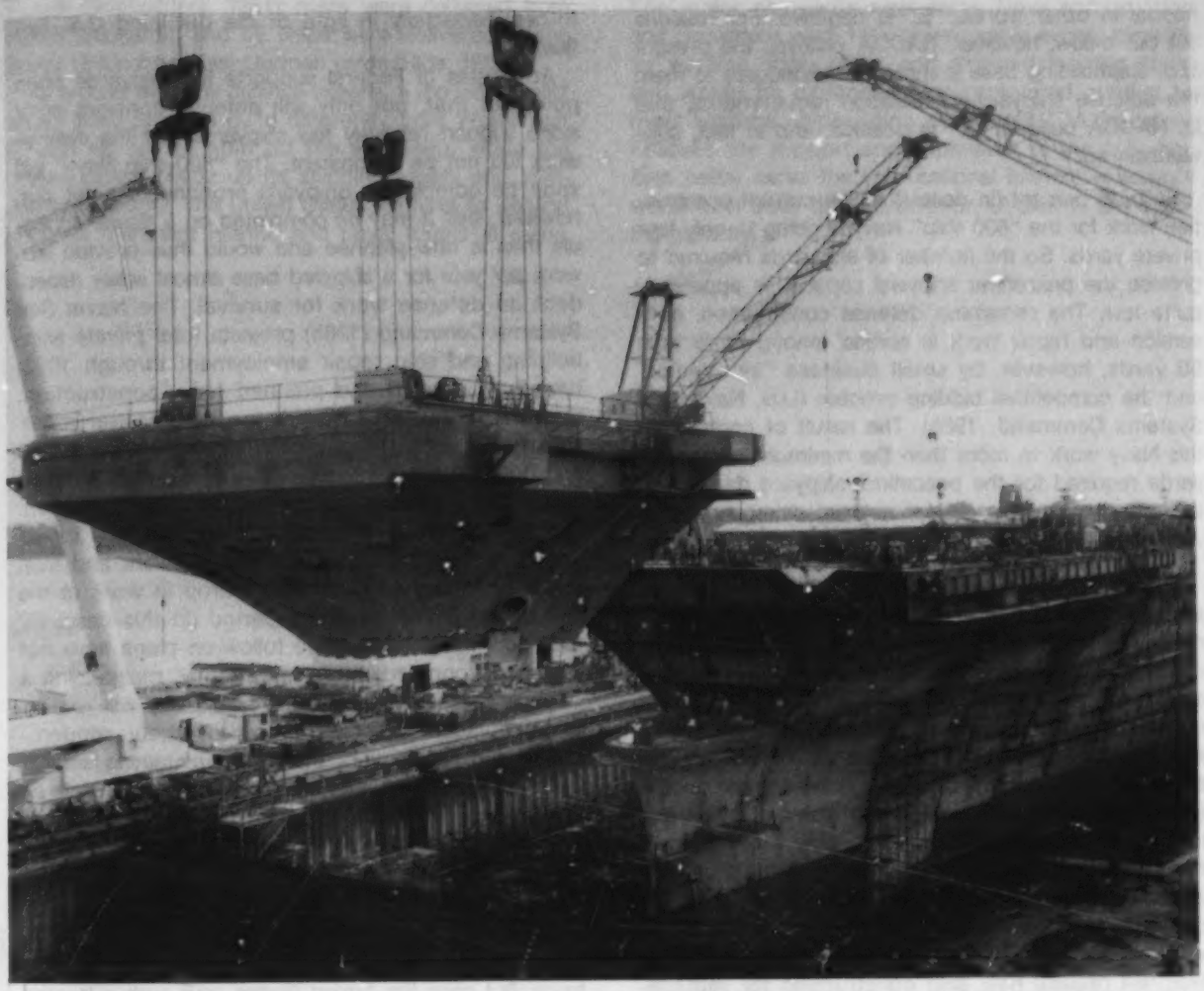
operating at only about half capacity in workers and steel throughput—and only about a third of their capacity to build new vessels, especially if more simplified commercial vessel construction work were available. The four yards that estimated their surge capacity under full wartime mobilization assumed adequate time to reach full employment, training and production. They also assumed "21 shift" work schedules (3 shifts per day, 7 days per week) and ready availability of required steel and critical components. Their estimated wartime surge capacity suggests that, by maximizing employment levels and fully utilizing their present facilities, they could on the average increase their ship production output to roughly 6 times the present rate. The steel cutting and fabrication values suggest a possible increase of more than 8 times the present rate, reflecting the capacity to do considerable preassembly of vessel modules for transport to other sites for assembly.

NACOA also considered another approach to estimating wartime surge capacity by examining the increased production gained from triple shifting. Taking output of the daytime shift as 1.0, it is generally agreed that the production of the second shift is roughly 0.5, and of the graveyard shift is 0.25 (Sonenshein, This gives an aggregate manning of about 1.75 equivalent man-days. Assuming that shipyards are today working at roughly 40 percent capacity, full capacity under triple shifting conditions (1.75 x 2.5) would be 4.375. The Maritime Administration, in its input to models for the SYMBA Study, used an increased production under wartime conditions of 3.7 (Karlson, 1985).

All of these rough estimates point to an average potential increase in wartime shipbuilding capacity of about 4 to 6 times greater than in today's underutilized shipbuilding base, without expansion of facilities. Because facilities would be expanded in wartime, the increased production would actually be far greater. One shipyard manager, in his comments on the SYMBA Study, asserted that his achievable wartime shipbuilding rate would be considerably higher than that assumed in the SYMBA Study (Haggett, 1984). We compared the result of our cursory surge capacity review with those of the SYMBA Study because it, unlike the NADES Study, addresses wartime shipbuilding. NACOA concludes that newbuilding capacity during a prolonged conflict would probably be significantly greater than that assumed in the SYMBA Study, and planned wartime construction could thus be accomplished by a reduced shipbuilding base. Such conclusions ignore the serious problem of long leadtime for major components, but increases or decreases in the shipbuilding base would not affect this problem.

## Shipyard Mobilization Base Requirements

Much written on the requirements for the U.S. shipyard mobilization base addresses the *number of shipyards* needed. However, individual shipyards, even those considered "major," vary greatly in their shipbuilding capacity (number of building positions, etc.), and vary to a large extent in their current level of utilization. Some major yards today have far more unused capacity, and thus far greater ability to increase shipyard production quickly (i.e., "surge capacity"). For these reasons, NACOA has addressed instead



**A pre-assembled 700-ton bow section is lifted onto the aircraft carrier *THEODORE ROOSEVELT*. U.S. shipyards have recently made great strides in modular, or "zone," construction techniques, whereby major sections of a ship are constructed and pre-outfitted before movement to the hull building site. This approach might be used to advantage in a wartime expansion of shipbuilding capacity, with steel fabrication shops constructing ship modules for transport to other sites for assembly.**

**Credit: Newport News Shipbuilding.**

the *amount of shipbuilding capacity* required. What, then, is the minimum U.S. shipbuilding capacity required to serve the Nation in times of national emergency or war?

Let us define "X" as the minimum shipyard capacity required to sustain peacetime defense construction, conversion, repair and overhaul (e.g., Navy, Military Sealift Command and Coast Guard)—as well as some level of commercial vessel repair capacity. This work can be accomplished by few shipyards, or many, depending on their size and the extent to which their facilities are less than fully utilized.

Let us define "Y" as the additional shipyard capacity above "X" required in a national emergency for mobilization, including:

- Activation or conversion of sealift vessels.
- Activation of naval combatants.
- Accelerated completion of ongoing construction.
- Routine and battle-damage repair of Navy merchant sealift vessels.
- Possible construction of Naval and merchant vessels to replace those lost through attrition.

The required defense shipyard mobilization base, then, equals the base needed for peacetime work plus that required in a national emergency for mobilization. In other words, the required defense shipyard mobilization base equals X + Y.

Let us define "Z" as any remaining present shipbuilding capacity above that required for mobilization. Thus, the present U.S. shipbuilding base equals X plus Y plus Z.

There are those who believe that the present U.S. shipbuilding base (X + Y + Z) is inadequate to meet the Nation's required defense shipyard mobilization

needs. In other words, "Z" is negative. For reasons set out below, however, NACOA believes the present U.S. shipbuilding base is more than adequate to meet the defense shipyard mobilization requirements, that is, NACOA believes "Z" is positive, and in fact, substantially so.

Fully 75 percent (in dollars) of the current construction work for the "600 ship" Navy is going to only four private yards. So the number of shipyards required to provide the peacetime shipyard capacity is apparently quite low. The remaining defense construction, conversion and repair work is spread among more than 50 yards, however, by small business "set asides" and the competitive bidding process (U.S. Naval Sea Systems Command, 1985). The result of contracting this Navy work to more than the minimum number of yards required for the peacetime shipyard capacity is the preservation of a greater national emergency shipyard capacity within the peacetime base.

Official estimates of the minimum required national defense shipyard base have changed somewhat in recent years. The SYMBA Study of 1984 forecasts minor shortfalls in shipyard capacity; the shortfalls are in manpower for mobilization at the beginning of a major conflict and in manpower for newbuilding well into a prolonged conflict. Quantification of the required surge capacity depends, among other things, on the following assumptions: how much warning time there is to start pre-mobilization work; how many vessels require activation or conversion at the time of mobilization and how extensive this work will be; how much battle-damage there will be; how long a conflict will last; and how much vessel attrition there will be that will require new ship construction for replacement. Based upon shortfalls highlighted in the DOD Sealift and SYMBA studies, the Navy has aggressively increased its sealift readiness program by prepositioning more supplies near conflict areas, by placing more sealift assets under direct government control, by increasing the readiness of reserve fleets, and by planning to modify merchant vessels *before* mobilization. The amount of shipyard capacity needed for mobilization has consequently decreased. The recent NADES Study therefore demonstrates that even a substantially reduced private shipyard capacity would be adequate for mobilization requirements.

NACOA believes all additional surge capacity required for mobilization currently exists in the yards doing Navy peacetime construction, and Navy and commercial repair work. As a result, the remaining present shipbuilding capacity above that required for mobilization is not necessary for national defense. In other words, no Federal support program for preserving excess shipbuilding capacity to meet national emergency shipyard requirements is justified. This additional capacity should be allowed to respond to general market forces, especially in light of the declining U.S.-flag fleet.

Advocates of Federal supports for shipyards often point out that, not only will defense contract work alone support relatively few shipyards, but the defense work will not be a constant. The "600-ship Navy" will soon be completed. Shipyard proponents point out, however, that it may be completed on a slower schedule than is now planned and would thus provide less work per year for a shipyard base almost solely dependent on defense work for survival. The Naval Sea Systems Command (1985) projects total private shipbuilding and ship repair employment through 1993, based on current and planned Navy construction, conversion and repair work (no commercial repair work is included). The projection shows between 90,000 and 120,000 production workers from 1985 through 1991, and a precipitous decline to 62,000 in 1993. NACOA recognizes that such projections are based upon the Navy's 5-year plans for shipwork and thus characteristically show a severe drop in work at the end of the 5-year planning period (in this case, FY 1987 to FY 1992), because follow-on plans have not yet been approved. More importantly, maintaining a 30-year average life in a 600-ship Navy will require more replacement construction, overhaul, modernization and repair work than will maintaining smaller fleets as in the past. Navy experts project that defense shipwork programs will remain fairly constant after the 600-ship Navy is built (Sonenshein, 1985).

Completion of the sealift building and conversion program of the Military Sealift Command will be followed by a substantial drop-off in work for some yards, which will, in some cases, jeopardize their future existence. But once the Armed Forces have their expanded sealift assets, which are now being built and converted in U.S. yards, shipyard workload and capacity required for mobilization will decrease substantially. Some shipyard base will survive through Navy building of replacement vessels, through Naval and limited commercial vessel repair, and through arrangements where shipyard facilities are bonded by local port authorities.

The Shipbuilders Council of America points out (Rice, 1985a) that in the long term, commercial shipbuilding work is likely to move away from Japan and the Republic of Korea and toward the Peoples Republic of China. There are other developing nations also increasing their market share, however, and the United States could be well served by a situation where our complex combatants and other military vessels are built and maintained in U.S. shipyards while the commercial fleet is built and maintained overseas in the competitive markets of developing nations. Indeed, the Soviet Union builds its combatants in Soviet shipyards and many of its non-combatant vessels in foreign yards: In 1984, 51 ships were on order to the Soviet Union from Finnish shipyards (Association of

Finnish Shipbuilders, 1984); many were delivered from Polish shipyards, and 56 ships were delivered to the Soviet Union from East German yards (Rice, 1985b).

As argued by many defense experts, a modern conflict would likely proceed quite differently from World War II, with no ally to hold off the aggressor while the United States builds up its shipping assets and shipbuilding capacity. The United States will have to depend upon its merchant marine and naval forces *in being.* The major shipyards now doing Navy construction and conversion work have considerable excess capacity for wartime shipbuilding, and shipyard facilities could and would be expanded in a prolonged conflict to meet wartime shipbuilding needs. NACOA therefore believes the support and expansion of the U.S.-flag fleet better serve the U.S. national interest in today's world than does the preservation of excess shipbuilding capacity.

# Chapter 4
# Discussion of Proposed Solutions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# CHAPTER 4
# Discussion of Proposed Solutions

The number of vessels in the U.S.-flag fleet has declined significantly in recent years, shipyard employment has declined, and a number of small yards and a few major shipyards have closed. Widespread concern has been voiced that these trends will have serious implications for the national defense of our Nation. Our conflicts in this century have all been waged "overseas," and sealift vessels and the supporting shipbuilding and ship repair capacity have proved to be critical national defense resources. Although there has been general agreement, even from affected industry sources, that national defense is the major issue raised by the decline of U.S. maritime industries, there has been an extremely varied set of approaches to defining the problem, quantifying its magnitude, and proposing solutions. The range of solutions offered by public and private interests can be said to fall into three broad categories:

- Increasing supports for U.S. shipyards to preserve shipbuilding capacity.
- Increasing government-controlled sealift assets in peacetime.
- Increasing supports for U.S. ship operators to enhance privately owned sealift assets.

Within each of these broad approaches, a wide variety of proposals have been offered, as discussed below and in Appendix 6.

## Approach 1: Increased Support for U.S. Shipyards

### A. Federally Funded Shipbuilding Program

As part of the Navy shipbuilding program, a number of vessels have been built or converted to meet the MSC requirements for rapid deployment and floating prepositioning of military supplies. In addition to this MSC shipbuilding and conversion program, a number of supporters of U.S. shipyards have proposed a Federal building program for new militarily useful merchant vessels to be sold or leased to private operators or placed in reserve. Such a program was completed in the 1950s with the Mariner class merchant vessels built by the government and sold to private operators; similar proposals have been made in several recent studies and in legislation proposed in the 98th Congress. It has been argued (e.g., Leback and McConnell, 1984; Congressional Budget Office, 1984; Ullman and Pettavino, 1984) that this would provide an additional workload for U.S. yards, assure the military usefulness of the vessels constructed, and preserve the shipyard mobilization base. The newly constructed vessels could be placed directly into the reserve fleet to replace the World War II vintage ships there presently; or they might be leased or sold to commercial operators in the domestic trade to replace aging ships in the coastwise fleet, which could then be placed in reserve as appropriate.

To benefit U.S. shipyards significantly, such a Federal shipbuilding program would have to be of major proportions, on the order of 20 ships per year for a number of years. This would cost about $1.5 to $2 billion annually (Congressional Budget Office, 1984). Such a major Federal building program could benefit 5 to 10 shipyards. Contract awards given in blocks of 5 to 10 ships of the same design would enable the yards to build in series, increase productivity and use modern management techniques. Building new vessels into an overtonnaged market is unlikely to produce commercial opportunities to recoup the government's investment, however, and newbuilding of vessels for laying up in reserve fleets is highly cost-ineffective when existing hulls can be purchased at such low prices during the current shipping recession. The only justification for a major Federal building program would be preservation of excess shipbuilding base, and quantified defense requirements do not show the need for such an excess capacity.

### B. Renewal of Ship Construction Subsidy

Many U.S. shipbuilders advocate the renewal of a Federal subsidy for the construction of merchant vessels; 37 percent of the 229 merchant ships ordered in U.S. shipyards in the decade 1972 to 1982 were built using Construction Differential Subsidy (Office of Technology Assessment, 1983). Such a proposal received considerable support in the 98th Congress: the House of Representatives passed legislation allocating $200 million for a "Shipyard Incentive" subsidy program (H.R. 5220), although no action was taken in the Sen-

ate. Acknowledging failure of the Construction Differential Subsidy (CDS) program to achieve U.S. shipbuilding competitiveness, the new subsidy would have been modelled after the Navy shipbuilding program in that it would provide contract incentives to the shipbuilder to reduce costs. The "incentive payment program" was to be capped at 50 percent of the price of the vessel, as was CDS, but the figure used to calculate the subsidy would have been the bid rather than the final price.

To be effective, however, a construction subsidy program would have to be considerably larger than that proposed by the House. At current prices in U.S. shipyards, the $200 million subsidy in the 1984 House bill would allow about $400 million in new ship construction. At the current prices in U.S. shipyards, this would build about five modern containerships or about three 200,000 dwt tankers. This would have little effect on preserving the national shipbuilding base, and the small-order approach would not encourage increased productivity in U.S. yards. Although a Federal subsidy program would impose considerable cost to the Federal Treasury, it would cost half as much (because of the 50-percent limit on subsidy) as an equivalent amount of construction under direct Federal procurement. CDS vessels would be built for the commercial market, however, and the U.S. Government would have less control over their design and defense utility, and would have to spend additional funds to assure their military usefulness. Even with a 50-percent subsidy, few ship construction orders would be placed in U.S. yards, because this level of subsidy is insufficient to cover the true price differential between U.S. and foreign construction.

## C. Improving Capital Formation—The Maritime Redevelopment Bank

Plans for a government-sponsored, private redevelopment bank, whose principal authority would be to promote capital investment in shipbuilding through financing, refinancing and cofinancing arrangements, were contained in a legislative initiative in the 98th Congress (H.R. 3399), and have been reintroduced this year (H.R. 33). The proposed "Maritime Redevelopment Bank" would be established by restructuring the Title VII build and charter and the Title XI mortgage loan guarantee programs of the Merchant Marine Act of 1936, as amended. It is proposed that initial funding for the Bank would come from monies in existing Federal maritime revolving funds, but that the Bank would subsequently raise funds through the issuing of stocks and participation in secondary market operations, including the sale of mortgage-backed securities and debt obligations here and abroad. Through its financial arrangements and extended guarantee authority, the Bank's purpose would be to improve capital formation for shipbuilding in U.S. shipyards.

Shipyard management largely agrees, however, that capital formation is not a major problem—that capital can be raised for a vessel if there is a demand for it, and if the vessel cost and delivery time are acceptable. Impact on vessel pricing would require substantially lowered interest rates; this would be unlikely from an independent Bank, or would create a permanent drain on the U.S. Treasury if the Bank remained dependent on Federal money sources. Because of prohibitively high U.S. newbuilding prices relative to foreign shipyards, such financing assistance might still do little to affect demand for shipbuilding in U.S. yards. There may be merit in modifying the loan guarantee process, as was proposed in H.R. 3399, to resemble export subsidy programs used by a number of other nations, whereby a commercial bank would guarantee the first 7 years of a ship construction loan, and the Federal Government would guarantee the loan in the remaining years. Such a scheme would increase interaction with the free market, possibly improve loan decisions by involving commercial banks, and would commit Federal funds for less time. These changes can be accomplished more simply through amendments to the present Title XI program, however, and legislation for a "Maritime Redevelopment Bank" is not necessary.

## D. Cargo Preference—Increasing Shipbuilding Demand

An alternative approach to promoting construction in U.S. shipyards, which would not involve any direct Federal funding, is through a cargo preference scheme for commercial cargos. "Cargo preference" is the restriction of certain cargos or trades to carriage in vessels registered or built in the country imposing the preference. Currently, cargo preference in the United States applies only to the transport of government-impelled cargos. Most U.S. ship operators are quite dependent on this trade. The U.S. dry-bulk fleet might cease to exist in foreign trades without government-impelled cargos (Office of Technology Assessment, 1983). In 1984, 37 percent of all cargos, by weight, carried in U.S.-flag ships were government sponsored under various civilian agency programs. This 37 percent does not reflect a substantial additional amount of U.S. military cargo that was moved in U.S.-flag ships as required by the Military Transportation Act of 1904 (Wagner, 1985). Although it benefits U.S. ship operators, the government-impelled cargo preference is of sufficiently small scale that it does little to create U.S. shipbuilding demand. NACOA supports continuance of the limited cargo preference mandated in current U.S. law for government-impelled cargos; many

maritime nations have similar restrictions related to their governments' cargo shipments.

A recent Congressional proposal would have produced a demand for U.S.-built vessels by reserving a substantial proportion of U.S. commercial import and export of bulk commodities for U.S.-flag, U.S.-built vessels. The idea of using cargo preference for commercial cargos to increase the U.S.-flag fleet, by promoting demand for U.S.-built vessels, is not new. In 1972, the Senate narrowly defeated a bill to reserve 50 percent of all crude oil imports for U.S. vessels. The Congress passed a bill in 1974 to reserve 30 percent of all petroleum imports for U.S. vessels, but it was vetoed by President Ford. President Carter proposed a more modest scheme in 1977, reserving 9½ percent of all petroleum imports, but it was defeated in the House of Representatives. In 1981, after oil imports had declined, a bill was introduced to reserve up to 40 percent of all dry-bulk imports and exports, but this proposal never reached the House or Senate Floor (Loree, 1983).

A bill introduced by Representative Boggs (H.R. 1242) in the 98th Congress (in 1983) was the broadest in scope: it would have reserved 5 percent, increasing to 20 percent, of all wet- *and* dry-bulk imports *and* exports to U.S.-built, U.S.-flag vessels. The Boggs cargo preference bill would have created a shipbuilding demand estimated at about 20 vessels a year for 15 years, and provided a stable workload for a number of U.S. shipyards, supported an estimated 25,000 shipbuilding jobs (Calvert, 1983), and provided an opportunity for the yards to use series construction and improve productivity. Because this approach also would increase seagoing employment, the bill was strongly supported by a wide range of shipping and shipyard labor and management groups. There was also strong opposition, however, and, despite 153 cosponsors in the House of Representatives the bill never got past Subcommittee level in the 98th Congress. Opposition was especially strong from producers and shippers of grain, ores, coal and chemicals for bulk export who feared that increased prices from shipping in U.S. bottoms would hurt their export market. Their concerns were addressed by a later revised bill (H.R. 6222) that would have given tax credits to shippers using U.S. vessels, and thus spread increased costs of U.S. imports and exports across the entire taxpayer base rather than impose them on selected segments of the economy. This would have required the U.S. taxpayer to support an expansion of the U.S.-flag fleet, and preservation of U.S. shipbuilding overcapacity, through the building of about 300 new bulk carrier vessels in U.S. shipyards.

Several cargo preference bills have been introduced again in the 99th Congress. A number of arguments can be made against cargo preference; some of them were raised by the Reagan Administration in its opposition to the 1983 Boggs cargo preference bill (Shear, 1983). The proposed preference scheme would create an artificial demand for new U.S.-built bulk vessels to operate in trades that are already seriously overtonnaged. It would force Federal intervention in what is almost exclusively an international free market. Unlike the liner trade, which is regulated by the United Nations Conference on Trade and Development (UNCTAD) Code and bilateral trading agreements, the bulk trades among the major trading nations of the free world are overwhelmingly free of any cargo reservation restrictions (Loree, 1983).

A review of cargo reservation policies and laws of other nations (Maritime Administration, 1983b) shows that, except for government-impelled cargos, France is the only major trading nation that imposes cargo preference restrictions on bulk cargos. It is interesting to note that, even in the case of French law, the reservation applies to French-flag vessels but does not require that the vessels be built in French shipyards. Many developing nations have broad cargo preference laws, but they are largely unenforced. The Administration fears that enforced U.S. cargo reservation would precipitate retaliatory trade restrictions by other nations, which would further threaten U.S. exports already drastically reduced by the current strength of the dollar abroad. In addition, the proposal would create a Federal structure to set freight rates and monitor compliance among shippers that would be likely to make U.S. foreign bulk trade cumbersome, which might further hurt U.S. exports; transport of the vast majority of international bulk cargo is arranged by the purchaser, who may look elsewhere if trading with the United States means dealing with complicated regulations under a U.S. cargo preference law.

Finally, while the 1983 cargo preference proposal in the U.S. Congress mandated a 20-percent reduction in costs of U.S. shipbuilding and ship operations, it still would have provided U.S. shipyards and ship operators with a guaranteed market, which has not proved to be an effective way to increase the competitiveness of U.S. maritime industries. If a cargo preference scheme could be designed that satisfied the above-listed concerns, such a scheme might otherwise be in the national interest, because it would require an expansion of the U.S.-flag fleet, and thus our national sealift assets. Such an expansion of the U.S.-flag fleet would not, however, require that new vessels be built in U.S. shipyards. NACOA would not, in any case, support a cargo preference scheme that also *requires that preference cargo carriers be built in U.S.* shipyards, because the U.S. shipbuilding base currently has excess capacity for economic and defense mobilization requirements that need not be preserved.

### E. Other Federal Supports

A wide range of additional proposals has been made to increase Federal supports to private U.S. shipyards, or to otherwise preserve the shipbuilding base; they include:

**Federal purchase of private shipyards to be mothballed for a national emergency:** A precedent for this practice is an aircraft plant that the government owns in San Diego, which is idled, or "mothballed," to be used in case of emergency. The government already owns significant shipyard capacity, however, including 8 Naval shipyards, 1 Coast Guard Yard, 2 shipyards that are leased to private concerns, 3 overseas U.S. Naval ship repair facilities and numerous repair ships. Mothballed shipyards from World War I were not used in the emergency yard expansion for World War II. Because of changes in ship size and type, and shipyard technology and shipbuilding techniques, a modified World War II yard (as virtually all of our major shipyards are today) can probably not achieve the efficiency of a new yard optimally configured for more modern shipbuilding techniques, such as land-level building techniques rather than building ways or graving docks (Office of Technology Assessment, 1983). In time of war or national emergency, the Federal Government can regain waterfront property very quickly, if necessary, through exercising the power of eminent domain. Therefore, idle shipyards should be closed rather than preserved.

**Give more Naval ship repair to private shipyards:** Reducing the workload of public shipyards or even closing them is a legitimate proposal from an economic point of view; they do no new ship construction, but currently do almost 70 percent (by dollar value of contracts) of the Naval ship repair work and compete with the private sector in this market. On the other hand, the Nation's private shipyards might be nationalized—as was done in Great Britain—to allow government controlled "rationalizing" of the industry (through forced closing of excess shipyards) to fewer, more productive yards. An argument for government-owned yards is that they can be placed, maintained or expanded according to changing defense requirements. Also, shipyard work can be scheduled with no concern over labor disputes, because Federal workers cannot strike, which is especially important in time of war or national emergency. Current defense planning assigns activation and battle-damage repair of most combatant vessels to Naval shipyards. NACOA has not addressed this question, however, because a shift from public to private shipyards would have little effect on the overall shipbuilding capacity of the Nation, and therefore would not affect the central issue we are addressing in this report.

**Tax proposals:** The Shipbuilders Council of America has proposed an excise tax on all U.S. imports to provide funds to support shipyards. Another approach might be tax credits, independent of any commercial cargo preference scheme, to U.S. shippers who import or export on U.S.-flag vessels. Any new tax proposals would presumably be difficult to support at a time when the Administration and Congress are addressing tax reform and the elimination of tax supports to many special interest groups.

## Approach 2: Increased Government-Controlled Sealift Assets

### A. Increasing Government-Controlled Active and Specialized Sealift Fleets

The Navy has an ongoing program for expanding the strategic sealift assets of the Military Sealift Command fleet through a combination of newbuilding, and purchase and conversion of existing merchant hulls. Five specially designed new vessels are currently being built by General Dynamics-Quincy shipyard for maritime (floating) prepositioning of military supplies, and conversion is underway in several other yards of existing merchant hulls for eight additional maritime prepositioning ships to be stationed at sea with a full load of military equipment and supplies. Other conversion work includes completion of eight Fast Sealift Ships (33 knots) designed for the Rapid Deployment Forces; these ships will be kept in "reduced operating status" with skeleton crews aboard. Five new product tankers with coated tanks are being completed in Tampa Shipyards for a private operator who has a 25-year contract to provide wet-bulk carriage services to the Military Sealift Command. Although these vessels will be privately built and operated, the long-term U.S. Government charter contract includes full capital cost reimbursement with the U.S. Government as the sole client. Consequently, these vessels are usually counted in the MSC fleet rather than in the private U.S.-flag fleet. In addition, a number of existing merchant ships are being converted for MSC for specialized sealift purposes: 11 crane ships, 2 hospital ships and 2 aviation support ships. (See Table 18.)

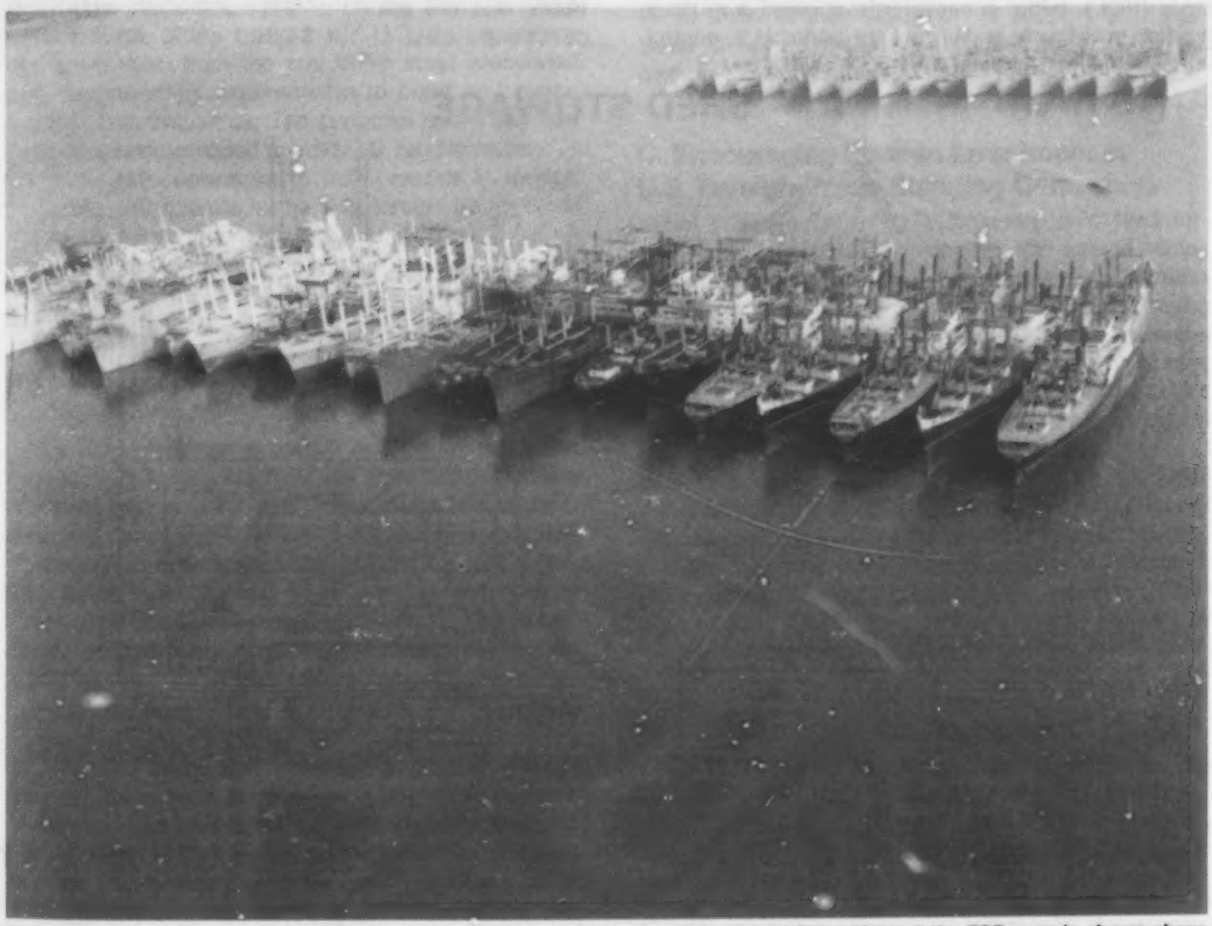
These efforts place a substantial number of specialized sealift, logistics and support ships under direct U.S. Government control, which makes government-owned sealift assets quite extensive. This effort appears to have been necessary partly because of the decline in the U.S.-flag fleet, but especially because of changing assumptions about the place, amount—and particularly the timing—of military equipment delivery that would be required for a modern major deployment. In response to current defense guidance, some measure of dedicated and specially designed sealift capacity under direct government control is required. Major sealift shortfalls will be met by the currently planned program, however, and no further expansion

of this program appears to be warranted nor is any currently planned.

### B. Increasing Government-Owned Reserve Sealift Fleets

The Navy has also been buying existing militarily useful merchant hulls at extremely low shipping-recession prices. In 1984, 19 vessels were purchased for $31 million; in 1985, 11 ships were bought for $83 million. All of these ships will be placed in the Ready Reserve Force, the most "ready" segment of the National Defense Reserve Fleet. Some of the vessels for this purpose have been purchased from foreign sources; five were Norwegian-built, and one specialized Army supply vessel will be foreign-built, because no vessel in the U.S. fleet meets the requirements. The Department of Defense recently proposed an expansion of this program. The Ready Reserve Force now includes 68 dry cargo vessels and 7 tankers; the currently approved goal is 77 dry cargo vessels and 16 tankers. A recent study on resizing the Ready Reserve Force (RRF), released by DOD in March 1985, proposes an increase of dry cargo vessels in the RRF to 100 (Kesteloot, 1985a), and the soon-to-be-completed "DOD Sealift Tanker Study" is expected to recommend an increase in the number of RRF tankers.

With respect to the reserve fleets, the recent DOD proposal to expand the number of dry cargo vessels in the Ready Reserve Force to 100 may be excessive. Purchase of laid up or excess commercial vessels, at current depressed prices, appears in the short term as cost effective. Maintenance of reserve vessels costs almost $1 million per year per ship, when activation exercises are included, however, and further expansion of the fleet will increase the future maintenance costs substantially. In addition, the vessels recently purchased for the RRF already have an average age of 27 years (Kesteloot, 1985a); they are largely obsolete breakbulk, steam-turbine vessels that require larger crews, outmoded crew skills and substantially greater times to load and unload than modern cargo ships.



**Part of the Ready Reserve Force (RRF) is moored bow-to-stern in Virginia's James River. Most of the RRF vessels shown above are self-loading breakbulk vessels. In the distance, a row of World War II *VICTORY* ships of the National Defense Reserve Fleet can be seen.**

**Credit: Maritime Administration, U.S. Department of Transportation.**

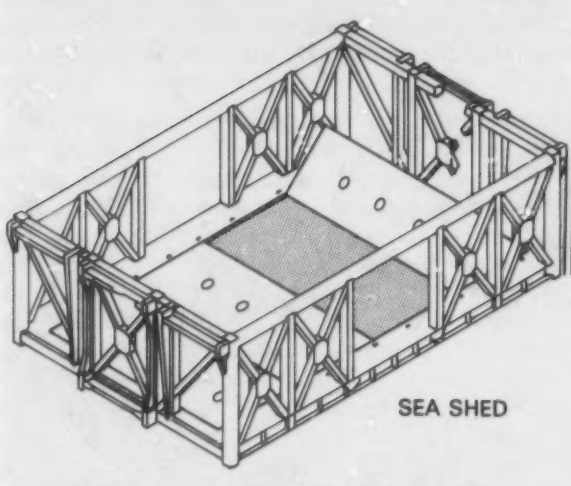
## Approach 3: Improved and Increased Private Sealift Assets

### A. Improving the Military Usefulness of Private Vessels

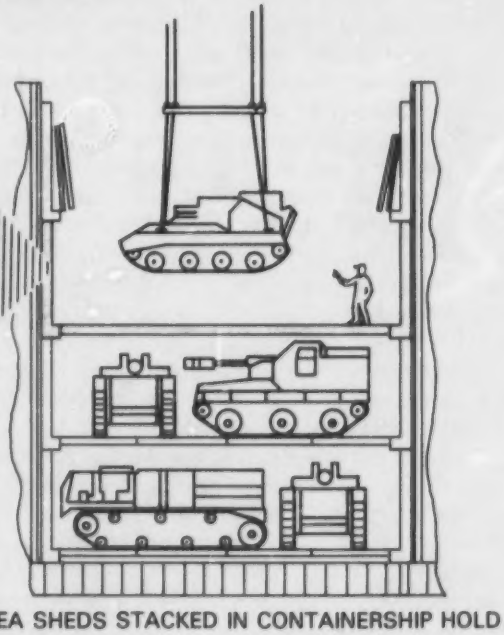
The Department of Defense is engaged in several ongoing efforts to improve the military usefulness of private commercial vessels in the U.S.-flag fleet. The Department of Defense has taken over responsibility from the Maritime Administration for installing, in commercial vessels, special Sealift Enhancement Features designed to increase the ability of sealift ships to communicate with Navy ships, refuel underway and offload in austere environments. The FY 1986 budget request includes funds to begin installing these features in U.S.-flag ships during peacetime to enhance their readiness and to reduce the shipyard conversion work and time required at mobilization. In a second effort, DOD planners are rethinking their approach to sealift assets for carriage of petroleum, oil and lubricants (POL). Initial assessments showed a serious shortfall in militarily useful tankers under U.S. control and a large excess capacity of crude carriers not considered to be militarily useful. The Department of Defense will probably propose an increase in the number of government-owned tankers purchased for the Ready Reserve Force, but plans also are underway to examine alternative sources and sealift assets for refined petroleum products.

The beginnings of a substantial ($400 million) program to modify standard containerships to carry military equipment larger than container size is included in the FY 1986 budget. Large, specially designed pallets (flatracks) and over-sized, open-topped, hinged-floored containers (seasheds) are planned to modify about 50 containerships to carry large and out-sized military heavy equipment. The cost of sufficient seasheds and flatracks to temporarily convert one containership for military equipment carriage would be about $10 million. Projected costs of the program to convert containerships to military cargo use appear high. The seasheds are basically large-scale, strengthened containers with self-activated, hinge-opening floors that are priced at $157,000 each; standard containers cost about $4,000 each. Admittedly,

## SHED STOWAGE



SEA SHED



SEA SHEDS STACKED IN CONTAINERSHIP HOLD

### SEA SHED PRINCIPAL DATA

| | |
|---|---|
| LENGTH | 40′–0″ |
| WIDTH | 25′–0″ |
| HEIGHT (OVERALL) | 12′–6″ |
| HEIGHT (INTERNAL) | 10′–10″ |
| TARE WT | 30LT 67,200 LBS |
| CARGO WT | 98.2LT 220,000 LBS |
| GROSS WT | 128.2LT 287,200 LBS |

**An artist sketch illustrates the seashed concept for shipping oversized military cargos in commercial containerships. The seasheds are open-sided, open-topped containers, three times the width of standardized containers, with a strengthened structure to carry great weight. As currently designed, each seashed has its own motorized, self-opening, hinged floor, which permits vertical loading of stacked seasheds with each "floor" closed when the shed below is full.**

**Credit: Maritime Administration, U.S. Department of Transportation.**

seasheds are more expensive to construct than are standard containers, but their pricing has not been subjected to competitive market forces, which generally reduces costs of a military procurement program by about 25 percent, in this case a potential savings of $100 million (Sonenshein, 1985). NACOA supports the concept of seasheds, but believes that costs should be brought down—through a procurement process more competitive than the current approach of small business set aside, through a more cost-effective seashed design, or through a different approach to modifying containerships.

Efforts should be continued and expanded to focus on using the active fleet in being—operated and maintained at private cost—rather that increasing the Federal costs of building or buying vessels to be tied-up and maintained in reserve fleets.

### B. Terminating "Build-U.S." Requirements

The Administration's formal maritime position, included in proposed legislation in the 98th Congress (H.R. 3156, S. 1038), seeks to aid U.S. ship operators by freeing them from the prohibitive costs associated with longstanding requirements to build and repair ships in U.S. shipyards. The proposal essentially has three components related to build-U.S. requirements:

- Allow U.S. operators to build vessels in foreign yards and operate in the U.S. foreign trades while keeping their Operating Differential Subsidy.
- Allow tax-deferred Capital Construction Fund monies to be invested in newbuilding in foreign yards.
- Allow foreign-built vessels immediate eligibility to carry government-impelled cargos as soon as they become registered under the U.S.-flag.

The Administration proposal has not so far been well received by the Congress. The Congress did allow a one-year period in FY 1982 during which operators receiving Operating Differential Subsidy were eligible to place ship orders in foreign yards, and authorizations for 36 new ships and 14 conversions were granted during that year. Foreign building authority for subsidized operators has not, however, been made permanent.

Requirements for U.S. ship operators to build and repair their vessels in U.S. shipyards in order to be eligible for government subsidies and other Federal supports have been in place since the major maritime legislation was passed in the 1920s and 1930s. The fate of these two maritime industries has been linked, and the shipowners have been forced to help support the U.S. shipbuilding base, regardless of whether or not newbuilding in U.S. yards made good economic sense for the shipping industry. Although U.S. ship operators must contend with several cost disadvantages, including U.S. crew costs, U.S. repair costs, and U.S. shipbuilding costs, it has been estimated that 65 to 80 percent of the differential between U.S. and foreign ship operations is attributable to U.S. shipyard costs (Loree, 1983).

At present, there are 29 "major" U.S. shipyards, according to the Maritime Adminstration's definition. Only six major U.S.-flag cargo ship operators remain, down from 19 in 1970 (May, 1985). In fact, less than 500 oceangoing vessels in the U.S.-flag fleet are greater than 1,000 gross registered tons, and 105 U.S. shipyards are capable of building or repairing vessels of this size (derived from data in U.S. Department of the Navy/Maritime Administration, 1984). This represents one large shipyard for every five U.S.-flag oceangoing vessels, probably close to one major drydock or building position for every major U.S.-flag oceangoing merchant ship. The U.S. shipbuilding base appears to have considerable excess capacity compared to the U.S.-flag shipping industry it serves, and this excess capacity has been preserved to some extent at the expense of a declining U.S.-flag fleet. U.S. ship operators need to be freed of their obligation to support U.S. shipyards to have some chance of competing for foreign trade in the world market.

### C. Encouraging Foreign Investment in U.S. Foreign-Trade Shipping Companies

The one element of the Administration's 1983 formal maritime proposal not dealing with foreign versus U.S. shipbuilding is a proposal designed to increase capital for U.S. shipping companies by encouraging foreign investment. The proposal sought to raise the legislated limit on foreign ownership of U.S. shipping companies from 49 to 75 percent. A major argument for believing that U.S-owned, foreign-flag vessels in the Effective U.S-Control fleet will be available in case of a national emergency, however, is based on the assumption that, in time of crisis, U.S. shipowners will naturally act in the best interests of their country. Greater than majority foreign ownership in U.S. shipping companies might create similar loyalties to foreign nations and thus complicate the availability of vessels for U.S. defense purposes.

### D. Allowing Other Ship Operator Supports

The Administration also proposed repeal of the 50-percent ad valorem tax on nonemergency repairs made to U.S. ships in foreign shipyards. This proposal was partially acted upon in the 98th Congress by allowing exemption from the ad valorem tax for U.S. vessels involved in cross-trading (foreign to foreign ports exclusively) that do not enter a U.S. port for two years. U.S. shipyard repair costs also are considerably higher than are foreign costs, and it is apparently common practice to have non-emergency repairs done

abroad, because the law is not strictly enforced. The U.S. Customs Service collected less than $10 million in FY 1984 in ad valorem taxes for ship repair (U.S. Customs Service, 1984a) so the repeal of this law would not greatly affect U.S. revenues.

In addition, U.S. ship operators need relief from U.S. seafaring crew costs that are by far the highest in the world (Loree, 1983; Congressional Budget Office, 1984). New shipbuilding, encouraged by access to lower foreign shipbuilding prices, would permit the entry of newer, more efficient vessels requiring far smaller crew complements. Modern vessels with automated diesel engine rooms, for instance, do not demand around-the-clock, 3-shift watches by engineers, wipers and oilers, which are now required by U.S. law, i.e., the "Three-Watch Law" [46 U.S.C. 8104(d)]. Some new vessels have engine-room controls and status boards on the bridge where they can be monitored by the deck officer on watch. Although the United States is currently the only major seafaring nation that offers a government training program for dual-licensed officers (deck and engine ratings), U.S. law restricts an officer from handling both functions on the same voyage, i.e., the "Crossover Law" [46 U.S.C. 8104(e)]. Similar longstanding restrictions in northern European and Japanese maritime laws have been changed to allow significant reduction in their crew size, which have in turn made their overall crew costs substantially lower than those incurred on U.S. vessels (National Research Council, 1984b).

Past Operating Differential Subsidy (ODS) payments offered little incentive for labor or management to reduce crew costs, because the Federal Government paid the entire differential between U.S. and foreign costs. The Nation's only unsubsidized major ship operator believes that ODS should not be necessary for new U.S.-flag vessels built in foreign yards. Some form of operating support will probably be necessary for a short period (5 years rather than the 20 years of present ODS contracts), however, while lower-cost and more automated foreign vessels are being phased into U.S.-flag service, and while U.S. manning regulations and labor practices are being changed. Crew size and wages must be reduced if U.S. vessels are to become competitive in the world market, and any form of Federal support must be designed to encourage or force such improvements rather than exacerbate the problem by paying the differential cost. NACOA proposes a new form of operating support in Chapter 5. (See Recommendation #6a.)

## E. Encouraging "Reflagging" of Foreign-Registered Vessels to the U.S. Flag

Today, shipowners from most of the major developed maritime nations are placing their ships under foreign registry to escape prohibitive operating costs, regulations or taxation. The world's largest fleet is under registry of the Liberian flag. Foreign flagging of U.S.-owned vessels effectively began in the early 1900s. As iron and steel steamships replaced wooden sailing vessels, Americans began purchasing and registering ships in Great Britain to avoid the rising costs of newbuilding in U.S. shipyards, which was then required for U.S. registry (Carlisle, 1981). During the 1920s and 1930s, two major U.S. companies—United Fruit and Standard Oil of New Jersey—pioneered in foreign registry with large fleets under the Panamanian flag. Large-scale flagging out of U.S. vessels began in 1939 when President Roosevelt encouraged transfer of U.S. vessels to the Panamanian flag to supply Great Britain in its war effort without violating the American Neutrality Act (Carlisle, 1981). After World War II, and its tremendous U.S. shipbuilding program for merchant sealift vessels, flagging out was encouraged to reduce the U.S. merchant fleet so that shipping competition would be reestablished and shipbuilding demand preserved. This flagging out was long and bitterly opposed by U.S. seagoing labor interests, but shipowners were eager to escape the high costs of crew, shipbuilding and taxation in this country. In 1984, roughly half of the vessels owned by U.S. interests were registered under foreign flags. Because the large bulk carriers are foreign registered, this represents about two-thirds of the U.S.-owned tonnage (Congressional Budget Office, 1984).

Taxation was originally a major problem prompting the flagging out of many U.S. vessels. Greece lost much of its flag-fleet to Liberia, but later instituted a set of tax incentives that encouraged repatriation of much of the Greek-owned fleet (E. Naess, 1972). Although the United States has not enacted tax incentives specifically for ship-owning interests, the current encouragements for U.S. business in general have affected shipowners. Qualifying U.S. owners with ships registered in a "less developed country" can take advantage of tax provisions relating to all U.S.-controlled foreign corporations (U.S. Internal Revenue Code, Subtitle A, Chapter 1, Subcharter N, Part III, Subpart F, 26 U.S.C. §951-964). Subpart F allows up to 100 percent deferral of annual shipping profits provided that earnings are reinvested in shipping assets within one year. Foreign registry tax advantages were lessened greatly, however, when recent business incentives were added to the U.S. tax code, especially the investment tax credit and accelerated depreciation. In fact, during the current global shipping recession, many U.S. owners of foreign-flag vessels have established their corporate base in the United States (largely through Delaware-based corporations), because the U.S. tax write-offs outweigh the advantages of Subpart F tax deferral in times of low income (Loree, 1985; Field, 1985; Granwell, 1985). Thus, ship operating income is taken out of the United States when profits

are high and brought into the country only when tax write-offs outweigh income to be taxed; neither situation helps the U.S. economy.

U.S.-flag vessel owners have an additional tax advantage in the Capital Construction Fund (100-percent tax deferral on income reinvested in U.S. shipyard construction). The ship operators CCF, combined with general investment tax credits and accelerated depreciation, have made the tax advantages of U.S. ship ownership sufficient that banks and limited partnerships have increasingly been buying ships and leasing them out to operators to use the excess tax credits against other income (Field, 1985). The current Treasury Department tax revision proposal would eliminate the Capital Construction Fund for shipowners, as well as investment tax credits and accelerated depreciation, but would preserve the Subpart F tax deferral on foreign earnings. From the point of view of shipping, this revision would eliminate tax incentives for bringing ships or shipping income into the United States while preserving the incentive to keep ships registered and income reinvested overseas.

It can be argued that encouraging a healthy Effective U.S.-Control (EUSC) fleet is in the national interest because of its defense utility and the fact that management control of the fleet is retained under U.S. ownership. On the other hand, foreign-flag vessels do not bring effective income into the United States, nor do they provide jobs for U.S. crew in peacetime, train them in case of national emergency, or allow U.S. defense considerations to affect ship design or military readiness. The EUSC is an important defense asset, but an increased U.S.-flag fleet also would be desirable.

The above proposals to aid U.S.-flag ship operators—by reducing crew size and wages and by eliminating requirements for shipbuilding and repair in high-cost U.S. yards—could be considered possible incentives for reflagging. Immediate access to government-impelled cargos upon reflagging also would be an incentive, although this "market" is small.

A successful review of reflagging incentives should probably begin with the premise of virtually no restrictions, similar to the situation now offered under Panamanian and Liberian registry, and work from there rather than from the status quo. Other suggestions for reflagging incentives include the following:

(1) The ODS regulations could be revised to allow a ship operator receiving subsidy for foreign trades to operate other unsubsidized vessels in the Jones Act domestic trade. This would allow more market opportunities and more flexibility for an operator considering the wisdom of transferring his fleet to U.S. registry.

(2) To make crew costs more competitive, while U.S. crew costs continue to readjust to a more reasonable level, limited use of foreign crews might be allowed on U.S.-flag vessels in foreign trades—such as annual "riding gangs" for shipboard repair to postpone the need for yard work; or even a period where mixed crews of U.S. officers and foreign seamen were allowed, to be phased into full U.S. crew after 5 years.

(3) Repeal of Subpart F of the Internal Revenue Code for U.S. owners of foreign-flag shipping assets would force the repatriation of their income. Then if shipping income were high, reflagging might become attractive to gain access to the tax-deferred Capital Construction Fund for U.S. shipowners. In preserving the advantages of keeping ships registered and income reinvested overseas, the Subpart F provision does not benefit the U.S.-based maritime industries, the U.S. defense mobilization posture, or the U.S. Treasury. Repealing Subpart F for shipping income would have little effect now while shipping revenues are generally low. The likely result of such a change also is unclear in the long-term, however. It might "encourage" reflagging, or it might force the sale of U.S. interests in foreign-flag vessels and thus decrease the Effective U.S.-Control fleet (Yourch, 1985).

(4) Because "flagging out" from U.S. registry requires government approval, shipowners may be wary of reflagging and being caught under U.S. flag. For this reason, registry regulations should be modified for reflagged vessels to allow some period during which they can automatically "flag out" again if they wish, perhaps the same 5-year period as the new operating support contracts NACOA proposes. (See Recommendation #6a.)

Many shipowners with foreign-registered vessels believe, however, that no set of incentives could be offered by the United States that would overcome the disincentives to reflagging here (Loree, 1984; Goldstein, 1985; E. Naess, 1985). They argue that U.S.-flag vessels could not be competitive in the open world market, and there is insufficient government-impelled preference cargo to create an attractive market. Another problem raised is the very large unfunded pension liability in the U.S. seafaring trades. This situation would be alleviated somewhat if more ships entered U.S. registry; however, new entrants would probably seek to avoid this responsibility by remaining non-union.

On the positive side is the fact that the United States may have more clout in negotiating bilateral trade agreements than do the "open" registry nations of Panama and Liberia. In addition, at 1982 meetings of the United Nations Conference on Trade and Development (UNCTAD) there was a move to phase out open registry. Although there was little agreement on this measure, and shipowners under open registry believe it is not a serious threat, some sources believe support may be broad enough eventually to produce a convention barring open registry (Office of Technology Assessment, 1983).

Although large-scale reflagging under any circumstances is not likely in the foreseeable future, a carefully designed package of incentives might attract a few vessels. Most Congressional proposals in the 98th Congress would have funded the newbuilding of only about half a dozen vessels a year. A reflagging even on that scale would halt the steady decline in the U.S.-flag fleet, or replace old ships in the present fleet with more modern and competitive vessels, without cost to the U.S. taxpayer.

Informal expressions of interest in NACOA's proposals for reflagging incentives have been made by both U.S. owners of foreign-flag vessels, and foreign owners of foreign-flag vessels. It might be argued that increasing the U.S.-flag fleet at the expense of Effective U.S.-Control vessels or merchant ships of our NATO allies does not improve the Nation's sealift assets. If these vessels were brought under U.S. registry, however, they would be available for peacetime work to enhance their sealift readiness.

## F. Allowing Limited Foreign Building for the Jones Act Trade

In the past few years, the "build-U.S." requirement for vessels in the domestic Jones Act trade has done very little to expand and modernize the fleet or to support U.S. shipyards by providing them with commercial shipbuilding work. About 60 percent of the 229 merchant vessels built in U.S. shipyards from 1972 to 1982 were constructed for the domestic Jones Act trade (Office of Technology Assessment, 1983). In 1983, however, there were no orders in U.S. shipyards for oceangoing cargo vessels to be built for the Jones Act trade, and in 1984, only five Jones Act vessels were ordered—hardly an orderbook to sustain a large shipbuilding base. Nor is it clear that the situation will change in the future. There was a great deal of Jones Act shipbuilding in the 1970s for the protected Alaskan oil trade, but domestic dry cargo carriage is increasingly moving to rail, truck and offshore tug/barge carriage. One U.S. ship operator recently decided against building a coastwise fleet for a "feeder service" to distribute its cargo brought in from overseas; the company instead moved its distribution hub inland to use a land-based rail transportation system for U.S. intercity delivery (Rice, 1985a). These types of decisions, to move to truck or rail cargo carriage, will reduce the amount of domestic intercity dry cargo carried by water, and may be difficult to reverse. Similar trends in moving from ships to offshore tug and barge carriage (Table 4C) have already reduced the cargo to sustain oceangoing, self-propelled vessels suitable for sealift. Eventual rebuilding of the Jones Act fleet of ships does not appear to be inevitable. Meanwhile, the U.S. domestic oceangoing fleet of cargo ships—especially the dry cargo vessels—is aging and shrinking, and offers an increasingly less satisfactory sealift capacity.

An approach supported by NACOA to preserve or expand the U.S. domestic oceangoing fleet is allowing a limited amount of new shipbuilding in foreign shipyards for the Jones Act trade. NACOA proposes a "coproduction" scheme for 10 years, during which a U.S. operator may earn credits for orders (ship construction or conversion) placed in U.S. shipyards, and may then use these credits for an equal dollar amount of shipbuilding orders in foreign shipyards; we also propose that such credits, once earned be transferable. Such a coproduction scheme seems a reasonable compromise: complete freedom to build in foreign shipyards should be allowed for U.S. operators in the foreign trades, because they must compete on the open world market; limited access to foreign shipbuilding should be allowed for the Jones Act operators who must compete against foreign-built truck and rail in this country but do not compete on the open world shipping market.

The major problem that a coproduction approach would raise is the need to protect domestic operators now operating with high-cost vessels built in U.S. shipyards—as required by the Jones Act provisions—against competitors who could operate less expensively with new foreign-built vessels. Because the domestic trades are already overtonnaged, introduction of low-cost, foreign-built vessels might "dump" the shipping rates and put present operators out of business (Rice, 1985a,b). This problem would be eased by establishing the coproduction program so that foreign building credits are earned only through ordering U.S. yardwork first, as we propose. Protection of present domestic operators also might be offered through tax credits, although this is less than optimal in periods of low profit; through government purchase of older U.S.-built vessels to be placed in the reserve fleets, which would provide the ship operator with capital for vessel replacement (although NACOA opposes expanded government purchase of outmoded commercial vessels); or through postdating the period of earning coproduction credits so that operators who have ordered vessels in U.S. yards most recently would be positioned to place foreign shipbuilding orders sooner than would other operators. The best approach to protections would have to be worked out carefully with the affected operators.

On the other hand, coproduction would allow modernization of the fleet with attendant reductions in operating costs, through newer, more efficient vessels that require less fuel and smaller crew. If this succeeded in making waterborne cargo carriage more cost-effective, the coastwise domestic fleet might improve its competitive position with respect to rail and trucking modes, and especially with respect to oceangoing tug and barge carriage, and cause an

expansion of the ships in the fleet and of their seagoing jobs. A coproduction period might also stimulate more commercial orders in U.S. shipyards than has the present build-U.S. requirement. In these ways, a decade of coproduction for the domestic trade might strengthen the Jones Act. NACOA strongly supports retention of the U.S. ownership and U.S. crew requirements of the Jones Act. U.S. control and U.S. citizen crew aboard vessels that are always sailing in our coastal waters, and are a vital part of our national defense sealift assets, are clearly in the national interest.

The U.S. Jones Act provision requiring that all vessels in our domestic trade be built in U.S. shipyards has been waived 87 times in the past 35 years, for periods ranging from a single voyage to a year-long waiver, and for cargos as variable as passengers, cable, fertilizer, liquified natural gas, toxic wastes, construction materials, and various military cargos (U.S. Customs Service, 1984b). Because of the high cost of U.S. shipbuilding and operations, the Jones Act restrictions create higher costs to consumers for domestic waterborne trade, especially in the noncontiguous trades between the U.S. mainland and Alaska or Hawaii, where land-based transportation alternatives are less attractive or not available. The State of Alaska, in particular, has questioned the need for continued Jones Act protections, because these protections affect the cost of so many of their goods (State of Alaska, 1984). A modernized Jones Act fleet, including some low-cost, foreign-built vessels, would help not only the domestic ship operator, but the U.S. consumer at large, and the Nation as a whole by enhancing the defense utility of the U.S.-flag fleet.

## NACOA Positions

NACOA does not support any increased or new Federal supports to the U.S. shipbuilding industry. The industry has overcapacity for the commercial market it serves, and the present shipyard base is substantially in excess of the capacity needed for defense mobilization, so no major Federal supports to preserve the present capacity of the U.S. shipbuilding industry are justified.

NACOA supports more concerted future efforts to find ways to increase the military usefulness of private merchant vessels and to increase the shipping tonnage in the private U.S.-flag fleet. We favor this general approach – increased use of private vessels as sealift assets—over increased supports to preserve excess shipbuilding capacity or increased government control of sealift assets. Programs to enhance the sealift readiness of active commercial vessels provide sealift assets that are acquired, operated and maintained mainly without government cost, and would provide ready crews familiar with the vessel upon mobilization.

Proposals to increase foreign ownership in U.S. shipping companies to greater than majority ownership seem unwise from a national defense standpoint, because U.S. control over the vessels might be tenuous.

We assert that longstanding requirements to build new vessels in high-cost U.S. shipyards have contributed to a long-term decline in U.S. waterborne trading opportunities and in the U.S.-flag fleet. The U.S. shipbuilding base has excess capacity—we believe more than needed even for a major mobilization—and U.S. ship operators should be freed from their longstanding obligation to help support the U.S. shipbuilding base through build-U.S. requirements.

An increase in the size of the U.S.-flag fleet is in our national defense interest. To encourage this, crew size and wages must be reduced, as well as shipbuilding costs, if U.S. vessels are to become competitive in the world market. U.S.-owned vessels registered in certain foreign nations are presumed to be available to the United States in case of national emergency. An increased U.S.-flag fleet is more desirable from a national defense standpoint, however, because these ships would provide work and training for U.S. crew, and are available for pre-mobilization installation of sealift enhancement features. Incentives should be offered to encourage reflagging of a modest number of U.S.-owned, and foreign-owned, vessels under foreign registry.

NACOA also believes limited foreign shipbuilding should be allowed for the domestic Jones Act trade. Eventual rebuilding of the fleet under the present build-U.S. requirement does not appear to be inevitable; dry cargo carriage is moving away from ships to tug and barge carriage and to land-based transportation modes. The domestic dry cargo fleet, particularly important for sealift needs, is declining in size and reliability.

In summary, it is NACOA's position that national defense needs for merchant sealift capacity rest more on ensuring the sufficiency of U.S.-owned, U.S.-flag and U.S.-controlled vessels—and trained U.S. citizen crew—than on preserving excess shipbuilding capacity in peacetime. We believe the set of recommendations presented in Chapter 5 of this report will serve these purposes.

# Chapter 5
# Summary, Conclusions and Recommendations

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# CHAPTER 5
# Summary, Conclusions and Recommendations

## Summary

The Merchant Marine Act of 1936 clearly states that protecting U.S. shipping interests and preserving U.S. shipyards are national defense requirements. It is increasingly clear, however, that this national policy, and the package of protections derived from it—tax credits, loan guarantees, government-impelled cargo preference, cabotage, and build-U.S. requirements—have had limited success in preserving a viable U.S.-flag fleet and merchant marine. Increased ship size and faster turnaround times in port have preserved the carrying capacity of some parts of the U.S. fleet, particularly the containerships carrying "liner" cargo on scheduled trade routes, but the carriage of dry-bulk commodities in U.S. ships has almost disappeared, and the overall percentage of U.S. foreign trade carried today in U.S.-flag vessels has declined to only 6 percent. Owing to competitive costs from other modes of freight transportation, including oceangoing tug and barge, and especially owing to the cost of vessel replacement in U.S. yards, our domestic Jones Act fleet of ships is aging and shrinking.

Three major shipyards have closed in the past two years (Maryland Shipbuilding, American/Lorain and Savannah). In addition, General Dynamics Corporation has announced it will close its Quincy Shipyard in the spring or summer of 1986, and the Shipbuilders Council of America reports that several more major private shipyards are on the verge of closing. Despite many build-U.S. requirements dictated by law, no commercial oceangoing vessel orders were placed in U.S. shipyards in 1983, only five such ships were ordered in 1984, and no orders have been placed so far in 1985. The shipbuilding industry, at least as far as the major shipyards are concerned, is approaching a "monopsony," a situation where there is only one buyer in the market. The U.S. Navy generated almost 90 percent of the work in the major U.S. private shipyards in 1984. The "system" of laws and Federal programs related to marine transportation is not working. National defense arguments are increasingly used to justify retaining present Federal supports, which the Administration wishes to terminate, or for expanding Federal supports—especially for the U.S. shipbuilding industry.

In peacetime, the national defense need for the maritime shipbuilding industries is carriage of government cargos and building and repair of military vessels. In case of national emergency, the primary national defense requirement for the U.S. shipping and shipbuilding industries is to provide combatant and sealift shipping capacity, and the shipyard capacity to activate, convert, repair or replace the ships. During a conflict or national emergency, sealift ships would be needed for the rapid delivery of military equipment and supplies overseas and for sustained resupply, and additional shipping assets would be needed to carry critical imports to this country and to sustain critical domestic trade. A shipbuilding base would be needed to the extent that naval and merchant vessels would require rapid activation or conversion at the beginning of a conflict, regularly scheduled maintenance, battle damage repair and new construction for replacement of vessels lost during a prolonged conflict. How much sealift capacity is needed depends on how the military chooses to deploy its forces and its equipment. How many sealift ships and how much of a supporting shipyard mobilization base are needed depend a great deal on how the Nation chooses to solve its sealift problems.

Defense mobilization planners are currently working with a conflict scenario developed by the Joint Chiefs of Staff—basically a protracted (3-year), nonnuclear, three-theatre, global conflict that begins in Southwest Asia and spreads to Northeast Asia, Europe and three oceans. A series of Department of Defense studies, completed from 1981 to 1984, examined the cost effectiveness and timeliness of airlift, prepositioning of supplies and sealift for delivery of military equipment and supplies to a distant conflict area, especially to one in Southwest Asia. The studies proposed a coordinated mix of the three approaches and concluded that the United States had shortfalls in all three. A companion study also found a marginally adequate shipyard capacity to support sealift needs. The military's response has been to design programs to remedy the shortfalls in airlift, prepositioning and sealift, and to reduce the amount of ship activation work required to mobilize sealift ships. If these programs are fully funded, DOD projects no shortfall in shipyard capacity for the early stages of mobilization,

even if the number of yards should decrease considerably. Potential shortfalls in shipyard capacity for newbuilding later in a prolonged conflict can be met with wartime expansion of shipyard facilities.

NACOA has reviewed a wide variety of studies and proposals that have been made by representatives of the Administration, the Congress, academia and industry for solving the problems of shipyard and sealift capacity. Because the national defense argument is so consistently used for preserving excess shipyard capacity in peacetime, NACOA found it appropriate first to examine various approaches to solving the sealift problem, including present DOD programs and plans, and then to assess the consequent shipyard capacity needed to support the Nation's sealift needs.

Although there are many variations on each theme, NACOA sees three approaches (Table 24) to enhancing sealift capacity:

1. Provide Federal supports to preserve excess shipbuilding capacity in peacetime time—so that needed warships and military sealift vessels can be activated, repaired and built during a major conflict.

Proposals include:

(a) A federally funded shipbuilding program, building militarily useful merchant vessels, designed to enhance sealift assets and preserve excess shipyard capacity. New vessels would be sold or chartered to private operators, if possible, or placed in reserve.

(b) Renewal of Construction Differential Subsidy (CDS) disbursements, with stricter guidelines for controlling U.S. shipyard costs.

(c) A "Maritime Redevelopment Bank" initially funded from Federal sources, intended to stimulate capital formation for shipbuilding projects and to provide work for U.S. shipyards.

(d) Cargo preference, to reserve a certain percentage of U.S. foreign bulk cargo trade to U.S.-flag vessels built in U.S. shipyards. The latest cargo preference proposal, in the 99th Congress, would create a demand for about 20 new U.S.-built bulk carrier vessels each year for 15 years.

(e) Other Federal supports proposed include government purchase of private yards, more Navy vessel repair work for private yards and several tax incentive proposals.

2. Increase the government-controlled merchant fleet—to have immediate and direct control of needed sealift assets during a major mobilization.

The only formal proposal at present involves expanding the government's reserve sealift fleet through increased purchase of existing merchant hulls, both dry cargo and tanker vessels, to be maintained in storage at government expense in high-readiness status.

3. Increase the number and military readiness of privately owned sealift assets in case of a major mobilization—through increased Federal supports and other measures to aid U.S. ship operators.

Proposals include:

(a) Increase adaptation of active, commercially efficient vessels to military usefulness, including pre-mobilization modifications to U.S.-flag vessels with commercial operators fully reimbursed for consequent operating losses.

(b) Terminate the requirements for U.S.-flag ship operators receiving Federal supports to build vessels in U.S. shipyards.

(c) Increase capital of U.S. shipping companies by allowing greater foreign investment.

(d) Repeal of the tax on non-emergency ship repairs done in foreign shipyards; amendments to laws and regulations that restrict reductions in crew size in U.S.-flag vessels; and continuation of some form of Operating Differential Subsidy (ODS), with stricter guidelines for controlling crew costs.

(e) Develop a set of incentives to encourage "reflagging" of U.S.- and foreign-owned vessels now under foreign registry.

(f) Allow limited foreign building for the Jones Act domestic trade to stimulate modernization and growth of ships in the U.S.-flag domestic fleet.

These proposals, and NACOA's position on them, are discussed in Chapter 4 of this report. Table 24 summarizes the proposed solutions, with NACOA, Administration and Congressional positions shown for each.

In summary, Congressional initiatives tend to fall into the first general approach—that of increasing Federal aids to U.S. shipyards to preserve excess shipbuilding capacity. Although a variety of such proposals were included in legislation introduced in the 98th Congress, none passed, and most did not get beyond Subcommittee or Committee level. Several bills have been introduced in the 99th Congress that would increase Federal aid to U.S. shipyards; to date, none have been passed by either House.

The Administration opposes virtually all efforts to increase Federal supports to U.S. shipyards, favors a continued buildup of government-owned sealift assets and is mixed in its response to various proposals for increasing and improving privately owned sealift assets.

For the most part, NACOA opposes the range of proposals initiated largely in Congress to preserve excess shipbuilding capacity, and opposes further growth in the government-controlled active and reserve sealift fleets without fully exploring other alternatives. NACOA supports a range of proposals from various sources, including our own deliberations, to increase the number and military usefulness of private vessels under U.S. control—those in the U.S.-flag domestic and foreign trades and those under foreign registry.

**Table 24.—Proposed Solutions to Shipyard and Sealift Problems.[1]**

| Proposed Solution | NACOA Position | Administration Position | Congressional Initiatives |
|---|---|---|---|
| **Approach 1.** | | | |
| **Increased Support for U.S. Shipyards** | | | |
| A. Federally funded merchant shipbuilding program | Oppose | Oppose | Proposed |
| B. Renewed ship construction subsidy | Oppose | Oppose | Proposed |
| C. The Maritime Redevelopment Bank | Oppose | —— | Proposed |
| D. Cargo preference requiring U.S.-built ships | Oppose | Oppose | Proposed |
| E. Other Federal supports | Oppose | Oppose | —— |
| **Approach 2.** | | | |
| **Increased Government-Controlled Sealift** | | | |
| A. Increase government-controlled active fleet | Oppose | Oppose | —— |
| B. Increase government-controlled reserve fleets | Oppose/Favor | Favor | —— |
| **Approach 3.** | | | |
| **Improved and Increased Private Sealift** | | | |
| A. Improve military readiness of private vessels | Favor | Favor | —— |
| B. Terminate build-U.S. requirements | Favor | Favor | —— |
| C. Encourage foreign investment in U.S. shipping companies | Oppose | Favor | —— |
| D. Allow other ship operator supports | Favor | Oppose/Favor | —— |
| E. Encourage reflagging | Favor | —— | —— |
| F. Limited foreign building for Jones Act fleet | Favor | Oppose | —— |

[1] Proposed solutions are listed according to NACOA discussion in Chapter 4 of this report.

Source: National Advisory Committee on Oceans and Atmosphere. 1985. Washington, D.C.

NACOA supports several Administration positions:

- "Build-foreign" proposals.
- Plans to enhance the readiness of private U.S.-flag vessels through installation of "Sealift Enhancement Features."
- Opposition to commercial cargo preference.

NACOA, however, opposes the Administration's programs and policies of:

- Continued emphasis on expansion of dry cargo and tanker capacity in the reserve fleet.
- Implementation of the Navy's "seashed/flatrack" containership modification program as currently designed and priced.
- Increased foreign investment in U.S. shipping companies.
- Phase-out of Operating Differential Subsidy, with no replacement program to support ship operators, and elimination of the Capital Construction Fund tax deferral.
- Reaffirmation of the "sanctity" of the Jones Act and continuation of the U.S.-built requirement for vessels in the Jones Act domestic trade.

Rigorous comparison with Congressional positions is difficult, because a unified new approach to shipyard and sealift problems has not yet emerged from the Congress.

## Conclusions

NACOA has reached the following conclusions:

1. ***Under current defense scenarios, sealift requirements for the initial stages of a modern major conflict depend more on the sufficiency of U.S.-controlled shipping—and on trained U.S. crews—than on shipbuilding capacity. Shipyard facilities can be expanded for new shipbuilding during a prolonged conflict. National efforts should therefore emphasize developing a viable Federal and commercial sealift fleet in peacetime, rather than preserving excess shipyard capacity.***

NACOA concurs with military strategists who point out that a modern global conflict would have to be fought with Naval and sealift vessels already built in peacetime. Unlike the beginnings of World War II, where the United Kingdom held off the aggressor for several years while the United States prepared for war, a modern global conflict would almost certainly mean immediate U.S. involvement and much more rapid developments requiring more "ready" response.

In a modern global conflict, or a unilateral U.S. action in Southwest Asia, a large number of dry cargo and tank vessels would be needed very quickly upon mobilization; U.S. reserve vessels and requisitioned foreign-flag vessels would require large numbers of trained and ready U.S. or allied crews. The critical shipyard capacity need is for activation and conversion of combatants and sealift vessels in the early stages of mobilization. Present and projected sealift capacity is deemed by DOD to be adequate for resupply. Wartime shipbuilding capacity is required largely to replace naval and sealift vessels lost in the conflict to the extent that reserve vessels and foreign-flag

assets are not available. There will be time to build up additional shipbuilding capacity if it is needed in a prolonged conflict.

2. ***Despite several recent major shipyard closures, the United States still has a very large shipbuilding and ship repair capacity, one of the largest in the world. There is sufficient surge capacity within those yards expected to survive economically, without direct government supports to satisfy wartime needs as defined by current defense scenarios. No Federal support of shipyards is necessary beyond the peacetime defense contract work.***

The United States has more than 600 ship design, shipbuilding and ship repair facilities; about 90 of these are shipyards with the capability for at least topside repair on a 400-foot vessel, and 29 are considered "major" yards with the capability to build or repair in a dry environment a vessel of at least 475 foot length. In addition, 9 public yards (8 Navy yards and 1 Coast Guard yard) are now employed only in military vessel repair but have done shipbuilding work in the past.

Total U.S. employment in public and private sector shipbuilding-related positions in 1984 averaged about a quarter of a million workers. The number of skilled "production" workers actually engaged in shipbuilding in private U.S. shipyards is currently about 96,000, and the public yards are scheduled to decrease their production workforce from 48,000 to 45,000 in 1985, which gives a total production workforce in U.S. shipyards of about 140,000 (Shipbuilders Council of America, 1985b). Although shipbuilding employment has decreased significantly in very recent years, the 1981 peak in private shipyard employment represented a 15-percent increase of 1971 levels, and the levels of the late 1970s and very early 1980s represented a post-World War II peak in shipyard employment. The current level of employment is sustained despite the fact that the U.S. private shipbuilding industry holds less than 2 percent of the world orderbook for commercial shipbuilding. This partly reflects the type of work being done in the U.S. shipyards—almost exclusively the building or repair of complex combatant vessels that are highly labor intensive.

Large-scale wartime construction of merchant sealift vessels (as was done in World War II) might be required in a protracted conflict. A NACOA review of shipyard mobilization capacity in the major defense-contract yards suggests considerable capacity exists—in workers, steel throughput and vessel tonnage output—in excess of what is being utilized in peacetime. The major constraint on expansion of wartime shipbuilding would not, NACOA believes, be limited shipyard capacity, but delayed availability of such major components as propulsion plants for Navy and merchant vessels and complex weapons systems for combatant vessels.

The federally funded program for building and converting specially designed vessels for prepositioned supplies and for sealift and support will be completed in 1986. Several major shipyards involved in the program see no future work they can rely on to keep their facilities open, and the Shipbuilders Council of America warns that this shipbuilding capacity may disappear rapidly. In addition, the Council argues that peacetime shipbuilding and repair programs proposed by the Navy have not been fully funded in recent years, and a stretching out of the proposed programs with less shipbuilding work each year would support an even smaller shipyard base.

Surge requirements for U.S. shipyards for a major mobilization have been lowered, however, through several government initiatives: by increasing the amount of prepositioned military supplies and thus reducing the number of sealift ships needed; by building and converting a number of vessels under government control for sealift; by increasing the readiness of our reserve fleets and thus reducing the shipyard work required for activation; by relying more on conversion of existing commercial vessels than on wartime newbuilding of sealift vessels; and by planning more pre-mobilization work on commercial vessels in the U.S.-flag fleet. Indeed, much of the work now supporting private shipyards will improve the readiness of sealift assets to the point that less shipyard capacity would be required for a future mobilization.

The present shipyard capacity appears to be substantially greater than that which would be required for defense mobilization. NACOA believes sufficient shipyards will be kept open without new Federal supports—through military shipbuilding, military and commercial repair work and leasing or bonding of shipyard facilities to port authorities for commercial repair work—to meet the reduced mobilization needs. This will be especially true if the Nation's sealift assets are increased and improved as suggested in the recommendations that follow.

3. ***Requirements to build in U.S. shipyards have, in recent years, impaired the competitiveness of U.S. operators of oceangoing, self-propelled cargo vessels, and have contributed to the decline in the U.S.-flag fleet. Through subsidies, tax credits and increased freight rates, these measures also have imposed costs on the U.S. public at large. Despite their intent to support the domestic shipbuilding industry, the build-U.S. requirements have failed in recent years to create substantial commercial work in U.S. shipyards.***

Such considerations as higher price, longer ship construction time and higher debt service on U.S.-built vessels—as well as a consequent lagging behind the

competition in upgrading capital assets—have affected the competitiveness of U.S. operators in foreign trades and the competitiveness of shipping against trucking, rail and tug/barge transport in the domestic trades.

The build-U.S. requirements were intended to guarantee work for U.S. shipyards to preserve a shipyard mobilization base. Except for defense contract work in the yards, however, newbuilding orders for ocean-going cargo vessels are minimal: none in 1983, only five in 1984 and none so far in 1985. Although the United States is the largest trading nation in the world, U.S. vessels carry only 6 percent of our foreign trade; domestic waterborne trade has been partially lost to pipelines, tug/barge, rail and truck carriage.

Many factors other than U.S. shipbuilding costs have contributed to this loss of cargo, or trading opportunities, for U.S.-flag vessels, but ship operators have asserted that U.S. ship construction costs are a major factor. The build-U.S. requirements thus are providing minimal help to the shipyards, while at the same time they are increasing capital and operating costs of the shipping industry, increasing costs to the U.S. public at large and discouraging modernization and expansion of the U.S.-flag fleet.

4. ***Most recent proposals to aid the U.S. shipbuilding industry—such as a federally funded merchant shipbuilding program, renewed construction subsidies, a federally backed maritime redevelopment bank, and expanded cargo preference—are either too small in scope to be of significant impact, do not address the most serious problems, or would create larger problems.***

Several bills in the 98th and the 99th Congresses have proposed extension of the Construction Differential Subsidy or a direct Federal building program for merchant vessels, but would have been funded only enough to build about 3 to 5 vessels in a year—hardly enough to affect a significant part of the national shipbuilding base. The proposed Maritime Redevelopment Bank sought principally to improve capital formation for shipbuilding, but the industry generally believes capital formation is not really a problem if demand for ship construction is present—in fact, lack of demand for shipbuilding is the real problem. One proposal that would have ensured demand for ship construction was a cargo preference scheme requiring that a significant portion of U.S. wet- and dry-bulk imports and exports be carried in ships registered and built in the United States, with tax credits offered to exporters of major bulk cargos to avoid placing the burden of higher shipping costs on them or on the producers of such goods. NACOA does not support such a cargo preference scheme, because the required new shipbuilding would add to present overtonnaging in the world bulk trades; the guaranteed market would not encourage competitiveness in the shipping and shipbuilding industries; U.S. Federal rate setting in a world market for bulk cargos, which is essentially unregulated, would be cumbersome and might discourage the use of U.S.-flag shipping or, worse, invite formal retaliatory actions in the form of comparable trade restrictions from other nations; and the combined costs to the taxpayer, from the proposed tax credits and from increased import and export prices, would be high. There are more efficient and less costly ways of ensuring sufficient sealift capacity, and more-than-sufficient shipbuilding capacity exists today.

## Recommendations

Based upon these conclusions, NACOA offers the following recommendations on national policy for the shipping and shipbuilding industries, and related aspects of defense planning for sealift and shipyard mobilization base. The bases of the recommendations are discussed more fully in the body of the report. NACOA recommendations supporting the shipping industry will increase the Nation's merchant sealift assets and may increase commercial work in U.S. shipyards; the sealift readiness recommendations will increase the readiness of government-owned and commercial sealift vessels and concurrently will decrease the amount of U.S. shipyard mobilization base required for national defense needs.

1. ***NACOA recommends opposition to proposals for a Federal shipbuilding program for commercial sealift vessels—or any other program requiring major Federal funding—designed largely to provide peacetime work for U.S. shipyards and to preserve the present excess capacity in the shipbuilding base.***

This recommendation does not apply to the ongoing ship construction and conversion program for specialized Military Sealift Command vessels designed for prepositioning, rapid deployment and other specific defense purposes.

A number of Congressional, academic, industry and government supporters of U.S. shipyards have proposed a Federal building program, in addition to these Military Sealift Command ships, for new militarily useful merchant vessels to be sold or leased to private operators or placed in reserve. NACOA believes this is not an efficient or cost-effective way of addressing the Nation's sealift problems. In such a Federal sealift shipbuilding program the taxpayer would pay for the vessels in three ways: (1) the taxpayer would incur the unnecessary expense of newbuilding in U.S. yards when comparable vessels can be built for much less overseas, and adequate already built vessels can currently be purchased in the United States and overseas at low costs; (2) the government-owned vessels would entail taxpayer-supported maintenance costs, even if

chartered or stored in reserve status; and (3) Federal subsidy or tax credit would likely be required to encourage private operators to charter militarily useful, commercially inefficient vessels in today's market conditions.

Building new vessels into an overtonnaged market is unlikely to produce commercial opportunities to recoup the government's investment, and newbuilding of vessels for laying up in reserve fleets is highly cost-ineffective when existing hulls can be purchased in U.S. or world markets at very low prices during the current shipping recession. The only justification for a major Federal shipbuilding program would be preservation of excess shipbuilding capacity for national defense needs. NACOA's review of national defense needs for the U.S. shipbuilding industry indicates that this and other forms of Federal support are unnecessary. Funding for peacetime military shipbuilding, conversion and repair is the only Federal support required for preserving a shipyard mobilization base adequate for a major conflict or national emergency.

***2. With respect to government-owned merchant sealift vessels, NACOA recommends that:***

***(a) In order to decrease the Nation's dependence on a government-owned and maintained Ready Reserve Force, the Navy and the Congress place greater emphasis on examining alternatives for increasing the numbers and the military usefulness of the operating U.S.-flag commercial fleet.***

***(b) The Navy and the Maritime Administration continue efforts to reduce the size and increase the readiness of the reserve sealift fleets, including continued scrapping of the World War II VICTORY ships and dispersing of the Ready Reserve Force vessels to locations nearer to planned activation sites.***

Because of a steady decline in the U.S.-flag fleet, a Ready Reserve Force (RRF) of high-readiness sealift vessels was established in 1976 within the National Defense Reserve Fleet, the Nation's "mothballed" merchant fleet. NACOA supports recent Department of Defense efforts to increase the readiness of the reserve fleets by replacing the World War II VICTORY ships, purchasing newer commercial vessels idled by the present shipping recession, and building (actually converting existing merchant hulls into) such special-purpose vessels as rapid cargo carriers, cargo-unloading crane ships and aviation support ships. Because of recently changed assumptions about the place, amount and especially the timing required for delivery of military equipment in a modern major deployment, defense guidance requires that some specially designed sealift assets be under immediate government control. Maintenance costs for the ships of the Ready Reserve Force, however, are almost $1 million per vessel per year, when the costs of activation exercises are included, and the planned expansion of this fleet would substantially increase its continuing maintenance costs. Exacerbating this problem is the fact that the average age of vessels recently purchased for the Ready Reserve Force is 27 years, which raises the likelihood that maintenance costs will increase rapidly, and replacement may be necessary soon. NACOA instead supports expanded efforts at finding cost-effective ways to adapt active commercial vessels, which are operated and maintained at private cost and have ready crews aboard, to meet defense needs.

Activations of Ready Reserve Force vessels are handled through general agency contracts with commercial shipping agents, with no government-coordinated plan to allocate towing assets or shipyard space to different reserve vessels under full mobilization. Although the ships of the Ready Reserve Force are maintained in high readiness (5, 10 or 20 days), continued attention should be given to possible activation delays imposed by "breaking out" and towing.

***3. With respect to privately owned U.S.-flag merchant vessels, NACOA recommends that:***

***(a) The Department of Defense and the Congress increase the emphasis on research and implementation of methods for adapting modern commercially efficient vessels to military purposes—rather than acquiring ships that have in the past been considered more "militarily useful" but can no longer be effectively used in peacetime trade.***

***(b) The Navy, the Small Business Administration and the Congress carefully examine the possibility of cost reductions in the proposed containership modification program.***

***(c) The Congress fund Department of Defense plans for Sealift Enhancement Features to be added to U.S.-flag merchant vessels in peacetime, with vessel owners fully compensated to the extent that such modifications interfere with commercial use of the vessel during installation and subsequent operations.***

Militarily useful vessels are defined according to size, draft, speed, unloading capability and capacity to carry specialized military cargos, such as large unit equipment (tanks and aircraft), or refined fuels and potable water. Unfortunately for military planners, the world's merchant ships have been growing in size and sophistication to provide fuel conservation and increased efficiency and have generally been changing in ways that make them increasingly less "militarily useful." Conventional wisdom, as evidenced in numerous past reports on shipbuilding and sealift, is that acquisition, or even the newbuilding, of non-commercially efficient vessels is necessary to satisfy defense sealift needs. Adherence to this policy would produce a government cargo fleet that could not operate

cost-effectively in peacetime and would thus be acquired and maintained only to serve in case of a national emergency. An additional consideration is that the very characteristics that make the general cargo vessels so attractive for sealift purposes—flexible breakbulk stowage and self-unloading capability—may come to be seen as a liability. As technology continues to develop for quickly unloading more modern vessels in austere environments, the slow and labor-intensive loading/offloading operations of the old breakbulk vessels may make their use less desirable. They would require more ready crew, trained in outmoded techniques, in a national emergency, and the slowness of cargo stowage and offloading would make these ships less timely in arrival and longer-term "targets" in unfriendly ports. NACOA supports DOD's initiatives to adapt its sealift plans to the commercial fleet of the present and future; and NACOA encourages expanded efforts in this direction.

One such effort seeks to modify U.S.-flag containerships to carry military unit equipment, through stacking of specially designed, oversized, open-topped "containers" (seasheds) and large pallets (flatracks). This would essentially allow breakbulk loading and offloading operations within a containership "hold." While NACOA supports the concept, NACOA concurs with industry sources who believe the costs of the federally funded program are unnecessarily high and should be reexamined. A standard 40-foot container costs about $4,000, while open-topped, oversized, strengthened "seasheds," each having a self-activated, hinged opening floor, cost $157,000 each. The problem may lie in the approach, the design, the procurement mechanism or in all three.

Because modern defense scenarios call for rapid availability of sealift assets, timely use of private commercial vessels requires the installation of "Sealift Enhancement Features" in peacetime. The Civil Reserve Air Fleet (CRAF) of privately owned U.S. cargo aircraft has been undergoing pre-mobilization enhancements for several years. In 1984, about $100 million was spent to adapt aircraft doors and decks for emergency loading of military equipment. The Department of Defense has in its FY 1986 budget a request for almost $67 million to modify commercially active U.S.-flag vessels to increase their capabilities for communication, underway refuel, self-defense and offloading in austere and unfriendly environments. For the minimal cost of reimbursing ship operators for lost revenues, this program will enhance the readiness of privately owned sealift assets, will reduce the shipyard time required for mobilization and also will decrease the need for expanded government-controlled fleets. NACOA supports this effort and believes it should be fully funded. In addition, the Navy recently announced a new program (Kesteloot, 1985b) to offer upfront payment for costs associated with addition of Sealift Enhancement Features in new U.S.-built vessels to aid in capital formation and encourage newbuilding of vessels for the U.S.-flag fleet. NACOA supports this initiative but suggests that the Navy also consider retrofitting, with Sealift Enhancement Features, U.S. vessels built in foreign shipyards and selected U.S.-owned vessels under foreign registry considered most adaptable to military use.

4. ***NACOA recommends that the Navy take steps to ensure the availability, training and readiness of U.S. crews needed for mobilization of reserve and foreign-flag sealift vessels; that the Navy seek, and the Congress appropriate, funding for an enhancement of the Navy's Merchant Marine Reserve.***

Current Navy initiatives are directed at identifying specific billets on all vessels (including foreign-flag ships of the Effective U.S.-Control Fleet) that would be required for mobilization, and at seeking agreements with seagoing labor unions to identify qualified active personnel, to keep updated information on their whereabouts at all time, and to provide necessary readiness training through union schools.

In addition to these efforts, NACOA believes such agreements should be formalized by designating the mobilization billets for officers in the Navy's Merchant Marine Reserve, and this Reserve program should be revamped to attract sufficient qualified active and inactive seagoing personnel to fill all these billets.

5. ***NACOA recommends that the Administration and the Congress continue to unlink national shipping and shipbuilding policies by eliminating all requirements for U.S.-flag operators receiving government supports to build vessels in U.S. shipyards.***

***We recommend specific amendments to the Merchant Marine Act of 1936 to:***

***(a) Allow permanent authority for U.S. operators to build vessels in foreign shipyards and still receive Operating Differential Subsidy, or whatever supports or incentives may replace that subsidy, for operating in the U.S. foreign trades.***

***(b) Allow Capital Construction Fund deferral of taxes on shipping if reinvested in foreign-built, as well as U.S.-built new vessels.***

***In addition, we recommend:***

***(c) Revision of regulations and administrative practice to allow Title XI Federal Ship Loan Guarantees for foreign vessel construction, with priority on loan guarantees that will provide growth and replacement in trades not already overtonnaged.***

***(d) Amendment of the provisions in various laws regarding eligibility to carry government-impelled cargos—to allow immediate eligibility to a foreign-built vessel rather than the presently required 3-year wait.***

This reiterates a recommendation in NACOA's 1983 report on marine transportation that *"U.S. shipowners should be permitted to qualify for ODS with respect to foreign-built vessels registered under the U.S.-flag."* However, based on the present review of shipping and shipbuilding and their national defense roles, NACOA has reversed its 1983 report recommendation that the *"Title XI and Capital Construction Fund programs should be preserved by the Maritime Administration with their benefits remaining applicable solely to vessels of U.S. registry constructed in U.S. shipyards."*

These U.S.-built requirements are intended to preserve excess shipbuilding capacity in peacetime to ensure an adequate shipyard mobilization base for national defense needs. As discussed in our conclusions above, NACOA believes it is unreasonable to hamper the competitiveness of U.S. ship operators to preserve the Nation's shipbuilding base. Further, the national defense arguments for preserving a large peacetime shipbuilding capacity have been overused. In addition, the "build-U.S." requirements are not having the effect of creating significant commercial orders in U.S. shipyards. The national defense needs for sealift require more concentration on U.S.-owned, flagged, or controlled ships—and trained U.S. crews—rather than on yard capacity. Thus, measures must be taken to free the U.S. shipping industry from unnecessary and ineffective restrictions.

NACOA offers three additional recommendations designed to encourage growth of the U.S.-flag fleet, which could provide additional sealift assets without government funding for shipbuilding, acquisition or maintenance, and also would provide more ready U.S. crew for mobilization.

6. ***NACOA recommends that Congress amend current maritime statutes that impair the competitiveness of U.S. vessels in foreign trade. Specifically, we recommend:***
   - ***(a) Establishment of a new form of operating incentives, under short-term (5-year) contracts that are linked to the success of measures to reduce crew size and operating costs.***
   - ***(b) Amendment of the ad valorem tax provision in the Tariff Act of 1922 to exempt oceangoing, self-propelled cargo ships from the duty on non-emergency foreign shipyard repairs.***
   - ***(c) Amendment or repeal of such shipboard manning laws and regulations as the "Crossover Law" and the "Three-Watch Law" to allow reductions in U.S. vessel crew size comparable to those of most other major seafaring nations.***

The U.S.-flag fleet must be allowed the freedom to be competitive in the world market if it is to expand and increase its utility as a defense sealift asset—both in vessels and trained seafaring crew. Some form of operating support will be required to allow U.S. vessels to compete in foreign trades while the fleet is being replaced with low-cost, foreign-built vessels, and the crew size and costs are coming down. NACOA proposes a short-lived (5-year) program of operating incentives be made available to all U.S.-flag operators in foreign trades, even those not currently subsidized, during the transition period while fleet modernization and effective manning are being achieved. The supports should definitely not be linked to the U.S./foreign cost differential but should be annual fixed payments, based on some measure such as vessel tonnage, and providing bonuses for improved efficiency, as do the Navy's "incentivized" shipbuilding contracts. Such "Operating Incentive Payments" should be set at an initial level similar to current Operating Differential Subsidy, but should be phased down over the 5-year period. Other costs of U.S. operation would meanwhile be reduced by our recommendations that building and repairing of ships in foreign shipyards be allowed for U.S. operators in foreign trades.

Currently, less than 200 U.S.-flag vessels are in foreign trades. Lack of competitiveness of U.S. vessels in the world market is due not only to the higher capital costs of U.S. shipbuilding, but also to ship repair and crew costs. U.S. crew costs are 2 to 3 times higher than those of other major maritime nations, and up to 5 and 6 times higher than those of developing nations. Dramatic reductions in crew costs have been accomplished in western Europe and Japan, without reducing wages, by substantially decreasing crew size and increasing job security. Similar improvements in U.S. crew size and wages have been made very recently, with non-union U.S. wages roughly comparable to those of western Europe. However, U.S. crew costs cannot be reduced to those of developing nations because of the relatively high U.S. standard of living. The progress of continued reforms in this country will require temporary exemptions from, and eventually amendments to or repeal of, U.S. Coast Guard manning regulations and shipboard manning laws to allow continued progress in effective manning.

7. ***NACOA recommends that the Administration and the Congress develop a package of incentives, in addition to those in recommendations #5 and #6, to attract foreign-registered vessels—under U.S. or foreign ownership—to the U.S. flag. We recommend that such set of incentives include a liberalizing of registry regulations for reflagged vessels, giving assurances to owners that they may easily "flag out" again during a certain number of years.***

Any measures that improve the competitive position of U.S.-flag vessels—such as the access to foreign shipbuilding and repair, immediate access to government-impelled cargos, "Operating Incentives

Payments" and forced reduction of crew costs, as proposed in Recommendations #5 and #6—also could be considered as possible incentives to encourage reflagging of some U.S.-owned vessels under foreign registry. Several additional possibilities for encouraging reflagging are discussed in Chapter 4 of this report. Such incentives also might attract some foreign-owned vessels under foreign registry, especially those of developed nations.

Reflagging incentives might simply move vessels of the Effective U.S.-Control fleet or of our NATO allies—already designated as sealift assets—into the U.S.-flag fleet. This would still enhance U.S. sealift readiness, however, because more U.S.-flag vessels would provide jobs and training for U.S. seafaring crews, and allow for Sealift Enhancement Features to be added in peacetime, which would make the vessels more ready for mobilization.

An increased fleet under U.S.-flag control would be highly desirable for defense sealift needs, and could reduce the need for expansion of the government-owned reserve fleets.

8. ***NACOA recommends amendment of the Jones Act to allow a 10-year "coproduction" period of some U.S. and some foreign building of new commercial cargo ships for the Jones Act domestic trade. We recommend that these provisions be applicable only to large oceangoing, self-propelled, cargo-carrying ships that are capable of contributing to the Nation's sealift needs in the case of a national emergency. We further recommend that provisions be written so that U.S. operators may earn credits for orders placed in U.S. shipyards and use those credits for an equal dollar amount of construction or conversion orders in foreign shipyards; we believe such credits should be transferable.***

In the past few years, the "build-U.S." requirement for vessels in the domestic trade has done very little to expand or modernize the fleet or to provide work for U.S. shipyards—in 1983, no new oceangoing cargo vessels for the Jones Act were ordered, only five were ordered in 1984, and there have been no new orders so far in 1985. Carriage of dry cargo is shifting from coastwise ships to oceangoing tug and barge carriage, and to truck and rail modes, and the Jones Act fleet of oceangoing, self-propelled dry cargo ships is aging and shrinking. A 10-year "coproduction" period might encourage modernization and possible expansion of the Jones Act fleet and its seafaring jobs. Reduced operating costs—with modern, efficient and less expensive foreign-built vessels having reduced crews—might allow expansion of the waterborne, coastwise market by taking some freight from oceangoing tug/barge carriage and some intercity cargos from truck and rail carriage. In this way, such a coproduction scheme could strengthen the Jones Act fleet.

By excluding small coastal vessels and tugs and barges from the coproduction provisions, we would protect the small U.S. shipyards from competition with low-cost foreign building of tugs and barges. We may, however, increase the relative competitiveness of larger, oceangoing cargo ships by allowing some foreign building of these vessels. This is consistent with the purposes of the NACOA report, because it would give a possible competitive advantage to the larger, self-propelled vessels that contribute to the Nation's sealift capacity.

Protections would have to be designed so that domestic operators now using high-cost vessels built in U.S. yards, as required by the Jones Act, would not be seriously undercut by competitors entering the trade with less expensive foreign-built vessels. Some approaches to providing such protections are outlined in Chapter 4 of this report.

NACOA strongly supports retention of the U.S.-ownership and U.S.-crew requirements of the Jones Act, because these vessels operate in our coastal waters and are an important part of our national sealift assets.

Because *every* U.S.-flag vessel deemed to be militarily useful by the Department of Defense would be used in a major mobilization, any continued decrease in the Jones Act fleet affects the defense sealift capacity of the Nation. NACOA believes coproduction could enhance the Nation's sealift capacity.

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# APPENDIX 1

## NACOA PANEL ON SHIPBUILDING

Don Walsh, Chairman

John E. Bennett
Richard T. Leier
Burt H. Keenan
Michael R. Naess*
Vernon E. Scheid*
Nathan Sonenshein
Jack R. Van Lopik*

### Panel Staff

Linda K. Glover, Study Director
Stephen Risotto, Oceanographer (May - December 1984)
Alice Roberson, Program Assistant
David Slade, Attorney
Victoria Jones Brimmer, Technical Writer/Editor

### Executive Director

Steven N. Anastasion (until June 1985)
Amor L. Lane, Acting Executive Director

* Former NACOA Members who participated in early Panel deliberations.

# APPENDIX 2
# Meeting Dates and Speakers

Titles of each participant are listed according to the title held at the time of presentation to the Committee.

| *Meeting Dates* | *Speakers* |
|---|---|
| ***May 23, 1983*** | |
| Robert Greene<br>Chairman<br>Shipyard Conference<br>American Waterways Operators | M. Lee Rice<br>President<br>Shipbuilders Council of America |
| RADM James Lisanby<br>Principal Commander for Acquisition<br>Naval Sea Systems Command<br>Department of the Navy | Stanley Wheatley<br>Director<br>Office of Ship Operations<br>Maritime Administration |
| ***July 11, 1983*** | |
| Lawrence Mallon<br>Counsel<br>Committee on House Merchant Marine and Fisheries<br>U.S. House of Representatives | Frank Pecquex<br>Legislation Director<br>Maritime Trades Department<br>AFL-CIO |
| Henry Marcus<br>Associate Professor of Marine Systems<br>Center for Transportation Studies<br>Massachusetts Institute of Technology | |
| ***August 25, 1983*** | |
| Jack Boller<br>Executive Director<br>Marine Board<br>National Research Council<br>National Academy of Sciences | Thomas Squarek<br>Vice President, Shipping Department<br>Morgan Guaranty Trust Company |
| James Gross<br>Associate Administrator for Research and Development<br>Maritime Administration<br>U.S. Department of Transportation | |
| ***October 19, 1983*** | |
| Hong Ju Nah<br>Maritime Attache<br>Embassy of the Republic of Korea | Jack Williams<br>Director, Technology and Innovation Division<br>Office of Production, Technology and Innovation<br>Department of Commerce |

| Meeting Dates | Speakers |
|---|---|
| ***December 6, 1983*** | |
| Ernst Frankel<br>Port, Shipping, and Shipbuilding Analyst<br>The World Bank | |
| ***January 30, 1984*** | |
| Panel work session | |
| ***March 19, 1984*** | |
| Lawrence Mallon<br>Counsel<br>Committee on Merchant Marine and Fisheries<br>U.S. House of Representatives | |
| ***May 1984*** | |
| Staff visit to National Steel and Shipbuilding Company's Shipyard, San Diego, California | |
| ***June 1984*** | |
| Staff visit to Newport News Shipbuilding<br>Newport News, Virginia | |
| ***June 25, 1984*** (closed session)<br>Deborah Christie<br>Director<br>Projection Forces and Analytical Support Division<br>Office of the Secretary of Defense | CAPT Ralph Buck, USN<br>Deputy Director<br>Resources and Policy Evaluation<br>Office of the Assistant Secretary for Shipbuilding and Logistics<br>Department of the Navy |
| ***June 26, 1984***<br>Peter Tarpgaard<br>Principal Analyst<br>National Security Division<br>Congressional Budget Office | |
| ***September 14, 1984***<br>Jack Boller<br>Executive Director<br>Marine Board<br>National Research Council<br>National Academy of Sciences | Charles Bookman<br>Senior Staff Officer<br>Marine Board<br>National Research Council |
| ***October 1-2, 1984***<br>Panel working session<br>San Francisco, California | |
| ***October 3, 1984***<br>Staff visit to Todd Pacific Shipyard, San Pedro, California<br>Staff visit to Local 9, Industrial Union of Marine and Shipbuilding Workers of America, AFL-CIO, Wilmington, California | |
| ***November 2, 1984***<br>Staff visit to National Headquarters, Industrial Union of Marine and Shipbuilding Workers of America, AFL-CIO, Silver Spring, Maryland | |

| *Meeting Dates* | *Speakers* |
|---|---|
| ***December 10, 1984*** (closed session) | |
| CAPT Ralph Buck, USN<br>Deputy Director<br>Resources and Policy Evaluation<br>Office of the Assistant Secretary for Shipbuilding and Logistics<br>Department of the Navy | CAPT Robert Kesteloot, USN<br>Director<br>Strategic Sealift Division<br>Department of the Navy |
| Deborah Christie<br>Director<br>Projection Forces and Analytical Support Division<br>Office of the Secretary of Defense | Russell Stryker<br>Associate Administrator for Policy and Administration<br>Maritime Administration<br>Department of Transportation |
| ***December 13, 1984***<br>Panel work session: discuss alternate conclusions and recommendations | |
| ***January 18, 1985***<br>Staff visit to Tampa Shipyards, Inc. Tampa, Florida | |
| ***January 24, 1985***<br>M. Lee Rice<br>President<br>Shipbuilders Council of America | Eugene Yourch<br>Executive Secretary<br>Federation of American-Controlled Shipping |
| John McConnell, Jr.<br>Attorney<br>Haight, Gardner, Poor and Havens | |
| ***March 5, 1985***<br>Panel discussion of draft report | |
| ***April 17, 1985***<br>M. Lee Rice<br>President<br>Shipbuilders Council of America | |
| Preliminary presentation of Panel recommendations to the full Committee | |
| ***May 13-14, 1985***<br>Closed Panel working session; review classified Department of Defense studies; discuss reviewer comments<br>Oakland, California | |
| ***June 4, 1985***<br>Briefing for the full Committee on results of Oakland working session | |
| ***July 15-16, 1985***<br>Plenary discussion of final wording for conclusions and recommendations. Unanimous NACOA approval of report | |

# APPENDIX 3
# Organizations Consulted

***Academic***

Georgetown University
Center for Strategic and International Studies

Massachusetts Institute of Technology
Center for Transportation Studies

National Academy of Sciences
National Research Council
Marine Board

***Congressional***

Congressional Budget Office

General Accounting Office

House Merchant Marine and Fisheries Committee

Office of Technology Assessment

Senate Armed Services Committee

Senate Appropriations Committee

***Federal***

Department of Commerce

Department of Defense

Department of Labor
Bureau of Labor Statistics

Department of State

Department of Transportation
Maritime Administration

Department of Treasury
U.S. Customs Service

Central Intelligence Agency

Federal Emergency Management Agency

U.S. International Trade Commission

***Foreign***

Association of Finnish Shipbuilders

Embassy of the Republic of Korea

Counsel General of Japan

***Industry***

American Waterways Shipyard Conference

Cadwallader, Wickersham and Taft

Edward M. Kaitz and Associates, Inc.

Exxon Shipping Company

Federation of American Controlled Shipping

Haight, Gardner, Poor & Havens

Marine Transportation Lines

Morgan Guaranty Trust Company

Shipbuilders Council of America

The World Bank

***Labor***

Marine and Shipbuilding Workers of America, AFL-CIO Local 19

Marine and Shipbuilding Workers of America, AFL-CIO National Office

Metal Trades Department, AFL-CIO

***Shipyards***

Avondale Shipyards

Bath Iron Works

General Dynamics - Electric Boat

General Dynamics - Quincy

Hyundai Shipyard (Republic of Korea)

Kawaski Shipbuilding, Ltd.
Litton - Ingalls

Lockheed Marine and Shipbuilding Division

National Steel and Shipbuilding Company

Newport News Shipbuilding

Tampa Shipyards, Incorporated

Todd Pacific Shipyards Corporation - Los Angeles Division

Todd Pacific Shipyards Corporation - Seattle Division

# APPENDIX 4
# Summary of the Administration's Maritime Policy: 1982-1984

In May and August 1982, the Administration released two announcements presenting a new Federal approach to maritime policy. Then Secretary of Transportation Drew Lewis, on May 20, 1982, presented a press release "Initial Elements of Maritime Policy Announced by DOT" (U.S. Department of Transportation, 1982a). Secretary Lewis quoted President Reagan's 1981 proclamation designating May 22 as National Maritime Day:

> *For too long, our shipping industry has been in a state of decline, and its ability to meet the nation's economic and defense needs has eroded. My Administration is firmly committed to the rejuvenation of the American merchant marine.*

An *"urgent need to redirect Federal maritime policies"* was stated by Secretary Lewis, with the primary objective *"to make the U.S.-flag commercial fleet competitive again in world shipping and to meet this nation's sealift requirements in the event of war or other national emergencies."*

The policy statement reaffirmed the "sanctity" of the Jones Act and existing cargo preference laws covering U.S.-flag carriage of government-impelled cargos.

The following specific policy positions were announced as quoted below:

> *Support of an extension of temporary authority, approved by the Congress last August, for subsidized U.S.-flag ship operators to construct or acquire vessels outside the United States and still receive operating-differential subsidies (ODS).*
>
> *Provide immediate eligibility for reflagged vessels for the carriage of Government-impelled cargoes. At present, foreign-built or rebuilt vessels must be documented under U.S. laws for three years before they can carry Government-impelled cargoes under provisions of Public Law 664.*
>
> *Administrative reform of ODS by DOT/MARAD to increase operating flexibility and reduce costs in the program.*
>
> *Encourage foreign investment in U.S.-flag shipping and permit the current 49 percent foreign ownership in U.S.-flag vessels to be increased to 75 percent. This would attract needed capital to the industry, but still retain U.S. management control.*
>
> *Relieve all U.S.-flag ships of the current 50 percent ad valorem duty on repairs performed abroad, providing flexibility to ship operators in making such repairs and reducing the repair costs to ODS.*
>
> *Reduction of unnecessary regulation of the shipbuilding and ship operating industries and establishment of a top level Government/industry group to further that effort.*
>
> *Support by the Administration of elimination of Federal Maritime Commission regulations governing the level of the rates of liner operators in the domestic trades which, under the Jones Act, are reserved for U.S.-built, U.S.-flagged and U.S.-crewed vessels.*

On August 5, 1982, the Department of Transportation released a second maritime policy statement "Lewis Announces Additional Elements in Administration's Maritime Policy" (U.S. Department of Transportation, 1982b). This policy statement also reaffirmed "existing laws which reserve domestic cargos to U.S. carriers (Jones Act) and provide access to cargos which are related in some manner to government-sponsored shipping" (government-impelled cargos). The Administration reemphasized its intentions to sign no new Operating Differential Subsidy or Construction Differential Subsidy contracts.

In addition, the Secretary of Transportation pointed out a number of actions already proposed or taken by the Administration to provide assistance to the maritime industries. For shipping: expansion of anti-trust immunity for international shipping; increased flexibility in operating subsidy regulations; elimination of regulations governing domestic shipping rates; proposed extension of build-foreign authority for subsidized ship operators; proposed increase in foreign investment in U.S.-flag shipping companies; and proposed legislation to allow overseas shipyard repairs. The

Navy's program to build and convert specialized sealift vessels was said to support the U.S. shipbuilding industry by providing an estimated level of work equivalent to 2 years of commercial order backlog.

The following specific new policy positions were announced:

> ***One.*** *The Administration will authorize an increase in the fiscal year 1983 ceiling on Ship Financing Guarantees (Title XI) from the prescribed $600 million to $900 million. The $300 million in additional Title XI authority would be held in reserve by the Secretary of Transportation to be used in the interest of national security. (This program provides government guarantees of private sector financing used for domestic vessel construction, conversion and acquisition projects.)*
>
> ***Two.*** *Permission should be granted to U.S.-flag vessel operators to use existing and newly deposited tax-deferred monies in Capital Construction Funds to construct or acquire foreign-built vessels.*
>
> ***Three.*** *The Department of Defense will continue its efforts to expand appropriate use of civilian non-government seafarers to crew government ships.*

Although there have been no comprehensive maritime policy statements since 1982, the Administration has continued to seek implementation of its 1982 policy initiatives despite a generally reluctant Congress. No Operating Differential Subsidy contracts have been signed, and the Congress has granted the Administration's wishes for discontinued authorization for Construction Differential Subsidy. Proposed bills to extend build-foreign authority for subsidized operators, however, have been introduced by Administration request, but have not fared well in Congress. The Administration has opposed Congressional initiatives to expanded commercial cargo preference and a U.S. Government-backed "Maritime Redevelopment Bank."

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Prepared by L. K. Glover.

# APPENDIX 5
# Availability of Effective U.S.-Control Vessels

The magnitude of the controversy over U.S.-owned, foreign-registered vessels can be seen even in the disagreement over what such registry arrangements shall be called. Since 1950, a ship *"owned in one country while it is registered in another for purposes of commercial or legal advantage"* has been said to sail under a "flag of convenience" (Carlisle, 1981). The owners of such vessels, however, have typically referred to these registry arrangements as "flags of necessity;" in fact, the present shipowners organization, the Federation of American-Controlled Shipping, was originally called the American Committee for Flags of Necessity.

## Background on "Flags of Convenience"

A brief history of U.S. shipowners' use of foreign registry is outlined in *"Sovereignty for Sale"* (Carlisle, 1981). Carlisle states that foreign registry for U.S. shipowners dates back to the War of 1812 when some American-owned merchant vessels flew the Portuguese flag to avoid American and British trade restrictions. In the mid-1800s, a number of American-owned vessels used a variety of flags to avoid treaties designed to stop the slave trade. In 1905, a decision of the Permanent Court of Arbitration at the Hague asserted that the flag and registry of a ship, not the ownership, certifies the ship's nationality. As early as the turn of the century, when iron and steel ships began replacing wood, Americans registered ships in Great Britain to avoid the high cost of construction in American shipyards, which was at that time required for U.S.-flag registry.

Foreign-flag registry was encouraged by the U.S. Government prior to World War II because the United States Neutrality Acts of 1935 and 1937 prohibited supplies to the United Kingdom on U.S.-flag vessels. A number of U.S.-owned, Panamanian-registered ships were used by the U.S. War Shipping Administration during this period under Time Charter Agreements to support Great Britain's war effort. The War Shipping Administration listed these vessels "under U.S. control," and the Panamanian flag became a "tactical" flag of convenience (Carlisle, 1981).

After the War, under the 1946 Ship Sales Act, hundreds of U.S. ships were transferred to Panamanian Registry mostly to avoid U.S. tax and labor laws. Approval from the Maritime Commission (predecessor of today's Maritime Administration) was required for "flagging out" an existing U.S.-flag vessel, but no approval was required for placing a newly built vessel under foreign registry. The practice of registering U.S.-owned vessels abroad quickly became so widespread that U.S. labor unions began in the early 1950s to protest the consequent decline in jobs for U.S. seagoing personnel. In 1950, the Senate Committee on Interstate and Foreign Commerce held a hearing on the controversial issue, and the term "flags of convenience" was first introduced in testimony at this hearing (Carlisle, 1981). The number of U.S.-owned, foreign-flag vessels has since increased dramatically, especially under Panamanian and Liberian flag. U.S. corporate ownership of Panamanian flag assets rose from 462 vessels in 1949 to 629 vessels in 1970 (462,000 to more than 3 million gross tons); Liberian assets in the same time periods grew from 15 ships measuring 221,000 gross tons to 1,840 ships comprising more than 34 million gross tons (Naess, 1972).

## National and International Legalities

A 1955 International Court of Justice (ICJ) ruling, having nothing directly to do with ships, introduced a principle that became a pivotal argument in the vessel sovereignty debates that followed. A German citizen living in Guatemala changed his citizenship to neutral Lichtenstein at the beginning of World War II, but the Government of Guatemala nevertheless seized his property as a German enemy. The Government of Lichtenstein protested to the ICJ, but the Court ruled in favor of Guatemala, and argued that there was no "genuine link" between Lichtenstein and its new citizen, because he had no residence or business in that country. Carlisle (1981) suggested that this can be viewed as a ruling against "citizenship of convenience." In 1956, the International Law Commission adopted

an Article (Article 29) that the "genuine link" principle also should apply to ship registry. The International Law Commission recommended to the first United Nations Conference on the Law of the Sea, held in 1958, that international law requires a *"genuine link between the State* [of registry] *and the ship"* (Naess, 1972; Carlisle, 1981). The Law of the Sea Conference adopted a provision requiring a "genuine link" between sovereign State and vessel registry but defined the required link as the State's effective exercise of control over administrative, technical and labor matters aboard a ship that flies its flag (Carlisle, 1981).

The issue was next raised at the first meeting of the United Nation's Intergovernmental Maritime Consultative Organisation (IMCO) [now the Intergovernmental Maritime Organization] in 1959. Article 28 of the IMCO Convention of 1948 (which was ratified in 1958) provided for the establishment of a Maritime Safety Committee; the members were to be drawn from *"those nations having an important interest in maritime safety, of which not less than eight shall be the largest shipowning nations."* Liberia and Panama at that time ranked third and eighth in total vessel tonnage; neither was elected to the Maritime Safety Committee, however, because the traditional maritime nations argued that registry of vessels owned by citizens of other nations did not qualify Liberia and Panama as "shipowning nations" (Naess, 1972; Carlisle, 1981). The consequent controversy was sufficient to result in the IMCO requesting an Advisory Opinion from the International Court of Justice. The 1960 Advisory Opinion of the ICJ ruled that the correct measure for ranking "shipowning nations" is the registered tonnage. The opinion also addressed the genuine link concept:

> *Neither the nationality of stockholders of shipping companies, nor the 'notion of a genuine link' between the ships and their country of registry is a relevant test for determining 'shipowning nations' (International Court of Justice, 1960).*

The controversy was also raging on the national front. Senator Warren B. Magnuson, in sympathy with labor, introduced a bill (S.1488) in 1957 that sought to prohibit American citizens or companies from owning foreign-registered vessels (Carlisle, 1981). The bill met with little success in the Congress. From 1958 to 1963, a series of court injunctions were sought, largely without success, to prevent U.S. seafaring labor from picketing "flag of convenience" vessels. A 1963 U.S. Supreme Court case, in which six nations filed "friends of the court" briefs, led to a decision that barred National Labor Relations Board jurisdiction over foreign-flag vessels with foreign seamen in U.S. ports; this freed the shipowners to seek court injunctions against picketing.

Throughout these debates, the major voices on each side of the argument were the shipowners, who wanted "open registry" to avoid the taxes, high wages, labor laws and expensive safety regulations of the developed maritime nations, and the seafaring labor unions in the developed nations that were seeing a decline in jobs for their members. Both began using national defense arguments: the unions warned that U.S.-owned, foreign-flag vessels and their foreign crews might not be available to the United States in a national emergency, so the practice of flagging-out should be stopped to bolster the U.S. merchant marine in the national interest. The shipowners argued that their vessels are available to the United States in case of national emergency and pointed to examples of their support in every modern U.S. conflict. The two sides are still making the same arguments, and the controversy over availability of the U.S.-owned, foreign-flag vessels continues.

## Availability of the Effective U.S.-Control Fleet

The United States first defined the "Effective U.S.-Control" fleet in 1947 in a wartime planning document of the Joint Chiefs of Staff's Joint Military Transportation Committee (Carlisle, 1981). They recognized that U.S. law (§902, Merchant Marine Act of 1936, as amended; 46 U.S.C. §1242) provides for Federal emergency requisitioning authority over any U.S.-owned vessel regardless of registry, but many nations have laws or regulations that would prevent this. At present, four Nations have no legal impediments to prevent U.S.-owned vessels from returning to the U.S. flag in a declared national emergency: Panama, Liberia, Honduras and, recently, the Bahamas. U.S.-owned vessels of these nations, sometimes called the PANLIBHON fleet, are what comprises the "Effective U.S.-Control" fleet (EUSC).

The emergency availability of these vessels has been argued for decades. A National Academy of Sciences report *"The Role of the U.S. Merchant Marine in National Security"* concluded, in part:

- *The absense of operational control restrictions in the existing maritime laws of PANLIBHON governments permits the exercise of effective U.S. control without restraint.*
- *PANLIBHON countries possess negligible capability to intercept, seize or protect shipping on the high seas. Consequently, these nations are not in a position to expropriate U.S. property afloat or to dispute U.S. assumption of control over selected shipping (Maritime Research Advisory Committee, 1959).*

In 1977 hearings before the House of Representatives, Subcommittee on Merchant Marine, Commit-

tee on Merchant Marine and Fisheries, widely varying opinions on availability of the EUSC vessels were expressed. The AFL-CIO's Administrator, Maritime Trades Department, said:

> *In short, Mr. Chairman, "effective control" is no more than an untested theory predicated on purely domestic law and advanced by the multinational oil companies as a rationale for avoiding American vessels and American Labor, taxes and safety standards (Moody, 1977).*

The President of the Transportation Institute testified:

> *The accepted principle of international law that only the state of registry has the right to requisition and control vessels flying its own flag, and not the nation of the vessels' owner, make our continued reliance on foreign-flag vessels dangerous (Brand, 1977).*

On the other hand, the Deputy Chief of Naval Operations for Logistics presented the following Administration position:

> *In case of mobilization, we believe those ships would be available for U.S. forces (Cooke, 1977).*

*The present Administration has been consistent on this subject. In a 1981 letter to the National Maritime Council, the Secretary of Defense included the following representations of Administration policy on the subject of "Effective U.S.-Control":*

- *These ships are considered in contingency plans for sealift requirements primarily as a source of ships to move essential oil and bulk cargoes in support of the national economy.*
- *The EUSC countries of registry have stated that they will assert no control over the employment of ships in their registries, and that they will not interfere with the exercise emergency authority by the governments of shipowners.*
- *Although we do not consider their crews as reliable as U.S. crews, we have no basis to believe that most of the ships in question would not be made available when needed (Weinberger, 1981).*

NACOA has reviewed the arguments, as well as various cases where availability of these vessels has been tested, and NACOA concludes that the "Effective U.S.-Control" vessels are an available and important national defense asset.

## References


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Naess, Erling D. 1972. The Great PanLibHon Controversy. Gower Press, Ltd., Epping, England, 175 p.

Weinberger, Caspar W. 1981. Letter (June 8) to the National Maritime Council, Washington, D.C., 2 p.


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Prepared by L. K. Glover.

# APPENDIX 6
# Selected Legislation of the 98th and 99th Congress on Maritime Issues

Appendix 6 is a listing of some bills of the 98th and 99th Congresses on shipping or shipbuilding-related issues. The bills are listed in the order that the issues appear in Chapter Four of this report. There is also a listing of other bills of interest.

References for this section are as follows:

Personal communications of NACOA staff with staffs of: Senate Committee on Commerce, Science and Transportation, Subcommittee on Merchant Marine; House Committee on Merchant Marine and Fisheries, Subcommittee on Merchant Marine.

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| Export of Oil | H.R. 1197 | |
| Maritime Agreements Act of 1985 | | S. 189 |
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| Diversion | H.R. 1151 | S. 188 |
| Wrecked Vessels | H.R. 5458 | H.R. 25 |
| Amend Subtitle II of Title 46 | | P.L. 99-36 |
| Limitation of Liability for Maritime Claims | | H.R. 277 |
| Replacement Training Vessel Fund | | H.R. 2533 |
| Amending Section 901(b) | | S. 1482 |

* Actual digest is included in earlier entry.

## 1. Federally Funded Merchant Shipbuilding Program

### Public Law 98-595 (98th Congress)

Official Title: A bill to improve certain maritime programs of the Department of Transportation and the Department of Commerce.

Sponsor: Mario Biaggi (D NY) (3 Cosponsors) (H.R. 5833).

Introduced: June 12, 1984.

House Committee: Merchant Marine and Fisheries.

Senate Committee: Commerce, Science, and Transportation.

Fate: Signed into law October 30, 1984.

**Digest**

This Act amends the Merchant Marine Act of 1936 to more efficiently manage the Title XI Program (Federal Ship Financing Fund) of loan guarantees for members of the maritime and fishing industries wishing to build or rebuild U.S. vessels in U.S. shipyards.

The Act requires the Secretaries of Transportation and Commerce to take into account certain economic criteria in addition to present required criteria, such as the extent to which construction or reconstruction of a vessel may contribute to overtonnage, and the realistic likelihood that the vessel will provide a positive economic capacity and eliminate the less serious or capable applicants.

According to this Act, the Secretaries of Transportation and Commerce are now allowed to assume an obligor's payments before initiating foreclosure. If foreclosure does occur, another U.S. operator may now bid for and take title of the vessel at the foreclosure sale and assume payments with existing Title XI financing.

The Act also requires the Secretaries to continue using the permitted range of Title XI fees charged to companies according to their credit-worthiness. The provision is designed to nullify a proposed Department of Transportation regulation to charge all users of the Title XI program the maximum fee permitted by statute irrespective of their credit-worthiness.

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### H.R. 5220 (98th Congress)

Official Title: National Defense Shipyard Protection Act of 1984.

Sponsor: Walter B. Jones (D NC) (5 Cosponsors).

Introduced: March 22, 1984.

House Committee: Merchant Marine and Fisheries.

Senate Committee: Commerce, Science, and Transportation.

Fate: Passed the House of Representatives on September 5, 1984. Referred to the Senate Committee on Commerce, Science, and Transportation, where no further action was taken.

**Digest**

This bill would amend the Merchant Marine Act of 1936 to allow a vessel operator to receive an Operating Differential Subsidy (ODS) even though the vessel was constructed in a foreign shipyard, if the owner of the vessel has constructed a vessel in the United States (coproduction) after January 1, 1984, that cost at least as much as the foreign-built vessel and otherwise qualified for an ODS contract.

The Secretary of Transportation would be authorized to use the Charter Construction Program to construct ships in U.S. shipyards, if the ODS and Construction Differential Subsidy (CDS) programs were not providing such incentive. Such vessels could only operate: (1) in the foreign commerce of the United States; (2) in foreign-to-foreign commerce; (3) round-the-world; (4) from the Pacific Coast to a European port including intercoastal U.S. ports; and (5) from the Atlantic Coast to a port in the Orient, including intercoastal U.S. ports.

A shipbuilding incentive program would be established. A shipyard could receive an incentive payment if: (1) it were capable of constructing simultaneously three qualifying seagoing vessels (not less than 450 feet), and (2) it had been designated, by the Secretaries of Transportation and the Navy, as a shipyard to which an incentive payment would be in the national interest. Upon approval by the Secretary of Transportation, a shipyard could receive a Shipyard Incentive Payment of 50 percent of this accepted bid, the sum to be paid in full when the construction contract was signed.

A shipyard incentive payment account would be established in the Treasury to provide funds for the Charter Construction Program, the Shipyard Incentive Program and Vessel Trade-In Program. Two hundred million dollars would be authorized for fiscal year 1985 for the Build-and-Charter Program and the Shipyard Incentive Program. Fifty million dollars would be authorized for the Vessel Trade-In Program. Any money received under the Vessel Trade-In Program would have to be used to construct vessels in the United States, and the construction contract would have to be signed within 3 months (down from the previous 12-month requirement).

The bill would also require the Federal Maritime Commission to submit a report to Congress within 18 months of the Act's effective date to assess the Act's impact on shippers' costs and U.S. ports, on any increase of regulatory burdens of litigation, and, any retaliatory actions initiated by other nations.

**Comments**

This bill is intended to reverse the *Austasia Intermodal Lines Ltd. v. Federal Maritime Commission* (580 F.2d 642) case where the court held the Federal Maritime Commission had no jurisdiction over a firm

that did not use any U.S. ports in the shipment of its cargo.

**Positions on Bill**

Opposed by the Administration, which viewed the bill as an inappropriate extraterritorial extension of U.S. law and an expansion of regulatory burden on the shipping industry; the Government of Canada; and National Industrial Transportation League.

Supported by the North Atlantic Conferences, the U.S. Gulf Carriers, the Trans-Freight Lines Inc., and the Philadelphia Port Corporation.

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### H.R. 5364 (98th Congress)

Official Title: A bill to authorize the construction of versatile motor vehicle carrying vessels under Title VII of the Merchant Marine Act, 1936, and for other purposes.

Sponsor: Roy Dyson (D MD) (4 Cosponsors).

Introduced: April 4, 1984.

House Committee: Merchant Marine and Fisheries.

Fate: Considered in conjunction with H.R. 5220. Not passed as an amendment to H.R. 5220.

**Digest**

This bill would authorize $450 million over a 2-year period to initiate a program to construct versatile motor vehicle carrying vessels similar to the Mariner Ship Construction Program of the 1950s. The bill was subsumed in H.R. 5220 during subcommittee markup session.

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### H.R. 368 (99th Congress)

Official Title: A bill to amend the Merchant Marine Act, 1936, to establish a new ship construction and reconstruction program to ensure adequate national defense capabilities, and for other purposes.

Sponsor: John R. McKernan, Jr. (R ME).

Introduced: January 3, 1985.

House Committee: Armed Services.

Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill amends the Merchant Marine Act of 1936 to establish a new shipbuilding program with respect to private charter operations. Its purpose is: (1) to provide a sufficient active sealift base for national defense; (2) to ensure national economic security; (3) to promote and maintain a shipyard, supplier, and labor base for the construction, support, and operation of a merchant fleet which serves as a naval and military auxiliary; and (4) to promote the foreign and domestic commerce through a viable U.S.-flag merchant fleet.

It directs the Secretary of Transportation to order the construction of new vessels and the reconstruction of older U.S.-built vessels when it is determined necessary to achieve and maintain sealift capability sufficient to meet the requirements of national emergency military mobilization. The Secretary is directed to develop the basic design requirements for such vessels, including suitability for commercial uses and features that maximize military utility. There are provisions for the advice of and coordination with the Secretary of Defense in meeting such directives.

H.R. 368 requires that such shipbuilding only be undertaken at private shipyards in one of the States, Puerto Rico, or the District of Columbia. It requires the Secretary to award construction or reconstruction contracts in accordance with the Federal Property and Administrative Services Act.

The funding for such shipbuilding shall be provided from the budget of the Department of Defense.

Provisions for the Secretary to charter or sell vessels built under this Act are set forth. The Secretary is directed in the event a vessel is not chartered or sold to place such vessel in the Ready Reserve Force of the National Defense Reserve Fleet.

This bill also creates a revolving fund for the Secretary of Defense for the deposit of appropriated sums and monies received from charter or sale to carry out the purposes of this Act.

## 2. Construction Differential Subsidy

### S. 125 (98th Congress)

Official Title: A bill to authorize appropriations for the maritime construction differential subsidy for fiscal year 1984, to promote a strong United States Merchant Marine, and for other purposes.

Sponsor: Daniel K. Inouye (D HI) (4 Cosponsors).

Introduced: January 26, 1983.

Senate Committee: Commerce, Science, and Transportation.

Fate: Referred to Subcommittee on Merchant Marine. Died in Subcommittee.

**Digest**

This bill would authorize appropriations of $300 million to the Department of Transportation for fiscal year 1984 to fund the Construction Differential Subsidy program of the Maritime Administration. The bill would also amend the Merchant Marine Act of 1936 to increase the limitation on the subsidy program from 50 percent to 60 percent. (See H.R. 5091.)

## H.R. 5071 (98th Congress)

Official Title: A bill to define criteria and procedures for the permanent admission of vessels built with Construction Differential Subsidy into the domestic coastwise trade.

Sponsor: Mario Biaggi (D NY) (8 Cosponsors).

Introduced: March 8, 1984.

House Committee: Merchant Marine and Fisheries.

Fate: Referred to Subcommittee on Merchant Marine on March 16, 1984. Died in Subcommittee.

**Digest**

This bill would amend the Merchant Marine Act of 1936 by setting forth the circumstances under which vessels built with the Construction Differential Subsidy (CDS) could commercially operate in the domestic coastwise trade. A "CDS Vessel" could only commercially operate in the domestic coastwise trade if the Secretary of Transportation determines that (1) existing service was inadequate, (2) such a vessel could not fund long-term commercial operation in the foreign trade; and if the Secretary of the Navy determines that national security will not be adversely affected by allowing such a vessel to operate in the domestic coastwise trade. Any outstanding CDS on the vessel would have to be repaid promptly, and if the vessel was allowed to operate in the domestic coastwise trade, it would be ineligible for the Operating Differential Subsidy.

**Positions on Bill**

Opposed by the AFL/CIO.

## H.R. 5091 (98th Congress)

Official Title: A bill to authorize appropriations for the maritime construction differential subsidy for fiscal year 1985, and for other purposes.

Sponsor: John R. McKernan (R ME).

Introduced: March 8, 1984.

House Committee: Merchant Marine and Fisheries.

Fate: Considered in conjunction with H.R. 5220. Not passed as an amendment to H.R. 5220.

**Digest**

This bill would reactivate the Construction Differential Subsidy program with an authorization of $250 million and remove the restriction that payments could not exceed 50 percent of the cost of constructing or repairing such a vessel. The bill was subsumed in H.R. 5220 during subcommittee markup session.

**Comments**

Given this amendment, it is estimated that the construction of less than five vessels would have been feasible.

## S. 102 (99th Congress)

Official Title: A bill to authorize appropriations for the maritime construction differential subsidy for Fiscal Year 1986, to promote a strong United States merchant marine, and for other purposes.

Sponsor: Daniel K. Inouye (D HI) (1 Cosponsor).

Introduced: January 3, 1985.

Senate Committee: Commerce, Science, and Transportation.

Fate: Subcommittee on Merchant Marine has concluded hearings as of March 29, 1985.

**Digest**

This bill authorizes appropriations of $300 million to the construction differential subsidy.

It amends the Merchant Marine Act of 1936 to raise the maximum construction differential subsidy payment to 60 percent of the construction contract price (currently 50 percent).

It increases the limitation on outstanding loan obligations for vessel construction, reconstruction, or reconditioning, from $12 billion to $15 billion.

## H.R. 2550 (99th Congress)

Official Title: A bill to amend Section 506 of the Merchant Marine Act, 1936, to permit permanent payback of construction differential subsidy.

Sponsor: Walter B. Jones (D NC).

Introduced: May 21, 1985.

House Committee: Merchant Marine and Fisheries.

Fate: Hearings held in Subcommittee on Merchant Marine on May 23, 1985.

**Digest**

This bill amends the Merchant Marine Act of 1936 to allow a vessel for which a Construction Differential Subsidy (CDS) has been paid to operate in the domestic trade under specified conditions that include the repayment of a proportionate share of such subsidy by the owner to the Secretary of Transportation.

It allows vessels that have been engaged in the domestic trade for two and a half years, and that were built without a CDS, to file a notice of harm (a notice that CDS-built vessels are harming such vessels to the point where they no longer can compete) with the Secretary. The Secretary is authorized to terminate the operation of the CDS-built vessel if the notice of harm is granted.

In addition, CDS-built vessels with 3 years of uninterrupted service in the domestic trade are allowed to operate permanently in the domestic trade if a proportionate share of CDS repayment is made.

Operating differential subsidy may not be paid to a vessel owner or operator for a vessel for which the CDS is repaid under this bill while the vessel is engaged in domestic trade.

## 3. The Maritime Redevelopment Bank

### H.R. 3399 (98th Congress)

Official Title: Maritime Redevelopment Bank Act of 1983.
Sponsor: Mario Biaggi (D NY) (16 Cosponsors).
Introduced: June 23, 1983.
House Subcommittee: Merchant Marine and Fisheries.
Fate: Died in the Subcommittee on Merchant Marine.

**Digest**

*Title I*—This part would amend the Merchant Marine Act of 1936 to establish a Maritime Redevelopment Bank of the United States. The bank would be an independent agency under the policy guidance of the Secretary of Transportation. The purpose of the bank would be to promote private investment in maritime enterprise. Original funding for the bank would come from money transferred by the Secretary of Transportation from all funds of the Capital Construction Fund; Federal Ship Financing Fund; excess payments from trade-in/trade-out program; repayments of loans; fees from obligations and commitments; income from sale of obsolete vessels; repayment of appropriations under Title V (CDS) and such sums from the Vessel Operating Revolving fund as necessary. Appropriations would also be authorized to replenish funds of the bank. The bank would have a 10-year lifetime.

*Title II*—This part would establish a National Shipbuilding Research Development Corporation to stimulate private capital investment without government intervention in shipbuilding research and development in both product and process technology in furtherance of the economic, trade, and national security interests of the United States. This would include looking for innovative ideas by using computers, robotics, zone construction, retraining programs for workers and joint ventures. The Corporation would be authorized to issue capital stock with voting rights and dividends, and it could also issue non-voting securities, bonds and debentures.

**Comments**

This bill has been reintroduced in the 99th Congress (H.R. 33). The International Trade Commission has been directed to study the issues involved with this bill and the competitiveness of the U.S. shipbuilding industry with foreign shipbuilding yards.

**Positions on Bill**

Supported by the AFL/CIO.

Unfavorable comments delivered by the Administration (Department of Transportation and Council of Economic Advisors) to the Subcommittee on Merchant Marine.

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### H.R. 33 (99th Congress)

Official Title: A bill to stimulate innovation, increase productivity, and improve the competitiveness of the maritime industry in the United States.
Brief Title: Maritime Redevelopment Bank Charter Act of 1985.
Sponsor: Mario Biaggi (D NY) (5 Cosponsors).
Introduced: January 3, 1985.
House Committee: Merchant Marine and Fisheries.
Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This is a reintroduction of H.R. 3399 of the 98th Congress.

## 4. Commercial Cargo Preference Requiring U.S.-Flag Ships

### S. 188 (98th Congress)

Official Title: Carriage of Mail on Vessels of U.S. Registry Act of 1983.
Sponsor: Daniel K. Inouye (D HI).
Introduced: January 26, 1983.
Senate Committee: Commerce, Science, and Transportation.
Fate: Passed the Committee on Commerce, Science, and Transportation April 10, 1984. Died without further Senate action.

**Digest**

This bill would add a new Section to Title IV of the Merchant Marine Act of 1936 that would:

1. Require the use of vessels of U.S. registry to originate any international sea transportation of U.S. mail;
2. Authorize contracts for carriage of mail by vessels of U.S. registry to be competitive and limited to 1 year; and
3. Prohibit the Postal Service, with minor exception, from contracting for the use of cargo containers on the basis of container size.

**Comments**

From 1920 to 1970, U.S.-flag ships were given preference to carry U.S. mail. In 1970, Congress passed a complete revision of Title 39 of the United States Code, which created and regulated the U.S. Postal Service. This revision did not contain any provision for U.S.-flag ship preference, although the Postal Service continued this policy by regulation. In 1981, the Postal Service deleted this regulation; since then the carriage of U.S. mail has been dominated by foreign-

flag operators, including Soviet bloc ships. This bill would return the U.S.-flag ship preference for the carrying of U.S. mail.

**Positions on Bill**

Opposed by Maritime Administration, U.S. Postal Service.

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## S. 1624 (98th Congress)

Official Title: A bill to promote increased ocean transportation of bulk commodities in the foreign commerce of the United States in U.S.-flag ships, and for other purposes.

Sponsor: Paul S. Trible (R VA).

Introduced: July 14, 1983.

Senate Committee: Commerce, Science, and Transportation.

Fate: Died in Subcommittee on Merchant Marine.

**Digest**

*Title I*—This would require 5 percent of all bulk cargos imported into or exported from the United States, by water, during 1985, to be carried on U.S.-flag ships and that a yearly 1-percent increase be invoked until U.S.-flag ships carried 20 percent of all imported and exported cargo. The Secretary of Transportation, upon a finding that U.S.-flag ships were not available within the guideline rates, could provide relief to an importer or exporter from these requirements.

The Secretary would be required to establish and publish rates for the carriage of bulk cargos subject to the bill. The rates (1) would be reviewed and adjusted annually; (2) would not reflect costs greater than current costs; and (3) would be the maximum rate that could be charged for the charter of a U.S.-flag ship subject to this bill.

*Title II*—Shipyard Facility Capital Construction Fund Act of 1983

This part would amend the Merchant Marine Act of 1936 to include certain U.S. shipyard facilities as being eligible for the establishment of a capital construction fund for the construction, reconstruction or repair of such a shipyard facility.

*Title III*—United States Flag Ship Use Incentive Tax Act

This part would amend the Internal Revenue Code to allow a tax credit of 10 percent of the qualified increased shipping costs when importers or exporters used U.S.-flag ships. Credit could be carried over for 3 years.

**Positions on Bill**

Opposed by Maritime Administration, Fertilizer Institute and other agricultural interests, Coal and Forest Products Exporters, and Federation of American-Controlled Shipping.

Supported by Shipbuilders Council of America.

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## H.R. 1242 (98th Congress)

Official Title: Competitive Shipping and Shipbuilding Act of 1984.

Sponsor: Lindy Boggs (D LA) (153 Cosponsors).

Introduced: February 3, 1983.

House Committee: Merchant Marine and Fisheries.

Fate: Passed by Subcommittee on Merchant Marine June 29, 1983. Died in full Committee.

**Digest**

This bill would require that, by 1984, 5 percent of all bulk cargos imported into or exported from the United States by water be carried on U.S.-flag ships, with 1-percent yearly increase until the percentage of bulk cargos carried on U.S.-flag vessels reached 20 percent.

The Secretary of Transportation would be authorized to provide relief to importers or exporters if U.S.-flag ships were not available to carry the bulk cargo.

The Secretary of Transportation would be required to establish and publish guideline rates for the carriage of bulk cargos subject to the Act.

**Positions on Bill**

Opposed by the Administration, the agricultural industry, and the Chamber of Commerce of the United States.

Supported by the American Maritime Officers Service, Shipbuilders Council of America, MEBA-AMO/AFL-CIO.

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## H.R. 6222 (98th Congress)

Official Title: United States-Flag Ship Use Incentive Tax Act of 1985.

Sponsor: Herbert H. Batemen (R VA) (8 Cosponsors).

Introduced: September 11, 1984.

House Committees: Merchant Marine and Fisheries Ways and Means.

Fate: Died in Committees.

**Digest**

*Title I*—This part would require that 5 percent of all bulk cargos imported into or exported from the United States by water, during 1985, be carried on U.S.-flag ships and that a yearly 1-percent increase be invoked until U.S.-flag ships carried 20 percent of all imported and exported cargo. The Secretary of Transportation, upon a finding that U.S.-flag ships were not available within the guideline rates, could provide relief to an importer from these requirements.

The Secretary would be required to establish and publish rates for the carriage of bulk cargos subject to

the bill. The rates (1) would be reviewed and adjusted annually; (2) would not reflect costs greater than current costs; and (3) would be the maximum rate that could be charged for the charter of a U.S.-flag ship subject to this bill.

All importers or exporters would be required to report to the Secretary of Transportation on the percentage of their imported or exported goods carried on U.S.-flag ships. Anyone not meeting the percentage requirements would be required to exclusively use U.S.-flag ships until the deficiency was recouped, unless exempted by the Secretary.

*Title II*—This part amends the Internal Revenue Code to allow a tax credit of 100 percent of the qualified increased shipping costs when importers or exporters use U.S.-flag ships. Credit could be carried over for 3 years.

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## S. 185 (99th Congress)

Official Title: A bill to revise the laws regarding the transportation of Government cargos in United States-flag vessels.
Brief Title: Government Impelled Cargo Act of 1985.
Sponsor: Daniel K. Inouye (D HI).
Introduced: January 3, 1985.
Senate Committee: Commerce, Science, and Transportation.
Fate: Pending in Senate Commerce Committee.

**Digest**

This bill requires that all waterborne cargo affecting the national security of the United States be transported in U.S.-flag vessels.

Such cargo includes: (1) all equipment and supplies bought for the Army, Navy, Air Force, Marine Corps, or Coast Guard; (2) all oil and other petroleum obtained for the strategic petroleum reserve; (3) all materials obtained for the national defense stockpile; (4) all motor vehicles and household goods owned by U.S. Government personnel whenever transportation of such goods at U.S. Government expense is authorized by law; and (4) any other materials, certified by the President or his designee, as affecting the national security of the United States.

This bill also requires the transportation in U.S.-flag vessels of 50 percent of cargo not affecting the national security when the U.S. government obtains the cargo for its own account, furnishes the cargo free of charge to any foreign nation, or sells the cargo to any foreign nation at a price that is less than the cost to the United States.

Similar requirements are also established where the U.S. Government's involvement is indirect, consisting of financial assistance used to pay for at least half of the cargo or for any of the foreign charges.

The bill sets forth directives for agency compliance with this Act and repeals specified laws to conform to its provisions.

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## S. 186 (99th Congress)

Official Title: A bill to further the development and maintenance of an adequate and well-balanced American merchant marine by requiring that certain mail of the United States be carried on vessels of United States registry.
Sponsor: Daniel K. Inouye (D HI).
Introduced: January 3, 1985.
Senate Committee: Commerce, Science, and Transportation.
Fate: Pending in Senate Commerce Committee.

**Digest**

This bill amends the Merchant Marine Act of 1936 to require the Postal Service to contract with U.S.-registered rate charges for such transportation of mail unless no such vessels are available, or those available are not sufficient. The bill also requires rate charges for such transportation to comply with the Shipping Act of 1984. Bidding for such contracts must be competitive, and contracts are limited to a 1-year duration. The Postal Service is prohibited from contracting with vessels based on cargo container size, unless necessary.

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## S. 187 (99th Congress)

Official Title: A bill to increase the role of the Secretary of Transportation in administrating section 901 of the Merchant Marine Act, 1936.
Sponsor: Daniel K. Inouye (D HI).
Introduced: January 3, 1985.
Senate Committee: Commerce, Science, and Transportation.
Fate: Pending in the Senate Commerce Committee.

**Digest**

This bill amends the Merchant Marine Act of 1936 to grant to the Secretary of Transportation the sole responsibility for determining and designating those programs which are subject to the requirement that at least 50 percent of government-generated cargos be shipped on privately owned U.S.-flag commercial vessels to the extent such vessels are available at fair and reasonable rates. The Secretary is further required to report to Congress annually on the administration of these programs.

## H.R. 1301 (99th Congress)

Official Title: A bill to promote orderly and efficient ocean transportation of dry bulk commodities in the foreign commerce of the United States, and for other purposes.

Brief Title: Maritime Dry Bulk Trade and Revitalization Act.

Sponsor: Brian J. Donnelly (D MA).

Introduced: February 27, 1985.

House Committees: Merchant Marine and Fisheries Rules.

Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

The purpose of this bill is (1) to promote the U.S. dry bulk cargo carrying capacity in order to transport 40 percent of U.S. dry bulk imports and exports in U.S.-flag ships within 10 years and to assist U.S. trading partners to carry an equal share of dry bulk cargo under their flag ships.

This bill directs the Secretary of the Department in which the Maritime Administration is operating to negotiate a Governing International Maritime Agreement with each nation with which the United States traded at least 5 percent by tonnage or value of total U.S.-traded dry bulk cargo in 1984. It directs the Secretary to also negotiate such an agreement with nations whose U.S. trade was less than the specified amount if such a nation asks to negotiate an agreement.

It also lists the essential provisions of a Governing International Maritime Agreement and directs the Secretary to enter into such an agreement with any group of nations that desires to execute the agreement on a regional basis.

Such an agreement is prohibited from becoming effective until 60 days after it is transmitted to the Congress. The procedures for a Congressional review of such an agreement also are set forth.

A non-national-flag ship is not allowed to transport dry bulk cargo with a trading partner except as authorized by the Governing International Maritime Agreement.

It provides that 5 years after enactment of this Act: (1) non-national-flag ships not documented under the laws of a trading partner are prohibited from transporting dry-bulk cargo; and (2) such ships documented under the laws of a trading partner are authorized to transport dry-bulk cargo between the United States and any nation not a party to such an agreement.

The Secretary of the Department in which the Maritime Administration is operating and the Secretary of the Treasury are directed to implement procedures to ensure that non-national-flag ships do not transport bulk cargo in excess of the authorized amount.

The Secretary of the Department in which the Maritime Administration is operating shall establish an advisory committee to assist in implementing this Act. Such advisory committee is required to report annually to Congress on its activities and the Secretary shall report to the Congress annually on actions taken pursuant to this Act.

## H.R. 1702 (99th Congress)

Official Title: A bill to protect and promote the American merchant marine by shipping U.S. mail exclusively aboard U.S.-flag vessels.

Brief Title: United States Mail Cargo Preference Act of 1985.

Sponsor: Helen Delich Bentley (D IA).

Introduced: March 25, 1985.

House Committees: Merchant Marine and Fisheries Post Office Civil Service.

Fate: Currently pending in Subcommittee on Postal Personnel and Modernization.

**Digest**

This bill amends the Merchant Marine Act of 1936 to require the Postal Service to contract with U.S.-registered vessels for international sea transport of mail. It requires rate charges for such transportation to comply with the Shipping Act of 1984 and authorizes competitive bidding for such contracts and limits such contracts to a 1-year duration.

It also prohibits the Postal Service from contracting with vessels based on cargo container size, unless necessary.

## H.R. 2573 (99th Congress)

Official Title: A bill to promote increased ocean transportation of bulk commodities in the foreign commerce of the United States in United States-flag ships, to strengthen the defense industrial base, and for other purposes.

Brief Title: I. Competitive Shipping and Shipbuilding Act of 1985. II. United States-Flag Ship Use Incentive Tax Act of 1985.

Sponsor: Herbert H. Bateman (R VA) (17 Cosponsors).

House Committees: Merchant Marine and Fisheries Ways and Means.

Fate: Currently pending in Subcommittee on Trade.

**Digest**

*Title I* (Competitive Shipping and Shipbuilding)—This part requires each importer or exporter of bulk cargos to transport at least 5 percent of such cargos in U.S.-flag ships in the calendar year following enactment of this title.

It requires annual 1-percent increases until the percentage of bulk cargos carried on U.S.-flag ships reaches 20 percent.

The Secretary of Transportation is authorized to provide relief from the requirements of this Act upon a finding that U.S.-flag ships are not available within guideline rates. It also sets forth factors that the Secretary shall consider in determining the extent of relief granted.

In addition, the Secretary is required to establish and publish guideline rates for the carriage of bulk cargos subject to this Act and to assure that such rates take into account certain objectives such as the availability of a militarily useful U.S.-flag bulk cargo fleet to meet U.S. strategic requirements in time of international crisis.

To establish guideline rates, the Secretary is required to estimate the current cost of operating U.S.-flag ships in U.S. foreign-bulk trades and of constructing such ships; such cost estimates are to be published within 6 months after enactment of this Act.

It requires that such rates: (1) be reviewed and adjusted at least annually; (2) not reflect costs greater than the estimated current costs; and (3) be the maximum rates that may be charged for the charter of U.S.-flag ships for the transportation of bulk cargos governed by this Act.

The Secretary also is required to establish and publish interim guideline rates in the first calendar year following the enactment of this Act and to establish factors to be taken into account in determining such rates.

Anyone engaged in importing or exporting bulk commodities in U.S. foreign commerce is required to report to the Secretary on the percentages of his/her exports and imports carried on U.S.-flag ships. Anyone who fails to transport the required percentage of U.S. bulk cargos is required to use exclusively U.S.-flag ships until the deficiency has been recouped, unless Secretarial relief has been granted.

Civil penalties and judicial review for violations of this Act are set forth.

*Title II* (Income Tax Credit for Increased Shipping Costs—United States-Flag Ship Use Incentive Tax Act of 1985)—This part amends the Internal Revenue Code to allow a tax credit for 100 percent of the qualified increased shipping costs where importers and exporters use U.S.-flag ships. It also provides for carryover of such credit for up to 3 years.

## 4a. Exemptions from Commercial Cargo Preference Requirements

### S. 664 (99th Congress)

Official Title: A bill to facilitate the competitiveness of exports of United States agricultural commodities.

Sponsor: Don Nickles (R OK) (13 Cosponsors).
Introduced: March 14, 1985.
Senate Committee: Commerce, Science, and Transportation.
Fate: Hearings held in Subcommittee on Merchant Marine on May 6, 1985.

**Digest**

This bill prohibits the cargo preference laws from applying to export activities of the Commodity Credit Corporation (CCC) or the Department of Agriculture under which: (1) stocks of farm commodities or the products thereof acquired by the CCC are made available to U.S. exporters, users, or foreign purchasers for the maintenance or expansion of commercial export markets for U.S. farm commodities; (2) commercial credit guarantees are blended with direct interest-free credits from the CCC to reduce the interest rate on export sales of U.S. farm commodities; or (3) the CCC or the Department of Agriculture promotes commercial exports of U.S. farm commodities. It also exempts from such prohibition export activity undertaken to fulfill an agreement entered into before enactment of this Act.

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### S. 721 (99th Congress)

Official Title: A bill to amend the Commodity Credit Corporation Charter Act regarding the export of agricultural commodities.
Brief Title: Agriculture Trade Amendment Act of 1985.
Sponsor: David L. Boren (D OK) (25 Cosponsors).
Introduced: March 20, 1985.
Senate Committees: Agriculture, Nutrition, and Forestry
Commerce, Science, and Transportation.
Fate: Passed the Senate Agricultural Committee on April 15, 1985. Failed in the Senate Commerce Committee on June 19, 1985. Placed on Senate Legislative Calendar under General Orders, Calendar No. 196, June 24, 1985.

**Digest**

This bill states that cargo preference laws shall not apply to export activities of the Secretary of Agriculture or the Commodity Credit Corporation under which: (1) agricultural commodities or products are made available for export market expansion or promotion; (2) commercial credit guarantees are blended with direct credits to reduce effective export interest rates; (3) direct or guaranteed credit for not more than 3 years is used to finance or guarantee export sales; and (4) export promotion activities are necessary to make such commodity competitive in international trade.

It also exempts from the provisions of this Act these agricultural export activities carried out under the Agricultural Trade Development and Assistance Act

of 1954 (P.L. 480) and under specified provisions of the Agricultural Act of 1949.

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### S. 930 (99th Congress)

Official Title: A bill to amend the Commodity Credit Corporation Charter to exempt all agricultural exports from cargo preference requirements.

Sponsor: Don Nickles (R OK) (8 Cosponsors).

Introduced: April 17, 1985.

Senate Committee: Commerce, Science, and Transportation.

Fate: Currently pending in Senate Committee on Commerce.

**Digest**

This bill amends the Commodity Credit Corporation Charter Act to exempt from the cargo preference requirements activities of the Commodity Credit Corporation or the Department of Agriculture that promote the export of agricultural commodities.

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### H.R. 1465 (99th Congress)

Official Title: A bill to amend the Commodity Credit Corporation Charter Act regarding the export of agricultural commodities, and for other purposes.

Sponsor: Cooper Evans (R IA) (9 Cosponsors).

Introduced: March 7, 1985.

House Committees: Agriculture
Foreign Affairs
Merchant Marine and Fisheries.

Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill amends the Commodity Credit Corporation Charter Act to prohibit the use of Commodity Credit Corporation funds to finance ocean freight charges for the export of agricultural commodities to the extent such charges are higher than they otherwise would be because of a requirement that the commodities be transported in U.S.-flag vessels.

It directs the Maritime Administration to pay such increased charges and authorizes appropriations.

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### H.R. 1466 (99th Congress)

Official Title: A bill to amend the Commodity Credit Corporation Charter Act regarding the export of certain agricultural commodities.

Sponsor: Cooper Evans (R IA) (7 Cosponsors).

Introduced: March 7, 1985.

House Committees: Foreign Affairs
Merchant Marine and Affairs.

Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill amends the Commodity Credit Corporation Charter Act to provide that no provisions of law requiring the transportation of U.S. agricultural commodities in U.S.-flag vessels shall apply to agricultural commodities exported by or through the Commodity Credit Corporation if such exports are covered by commercial credit guarantees that are blended with direct interest-free credit from the Corporation.

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### H.R. 1517 (99th Congress)

Official Title: A bill to assist in the export of United States agricultural commodities and improve farm income through exemption of such commodities from cargo preference requirements.

Brief Title: Agricultural Export Expansion Act of 1985.

Sponsor: Christopher H. Smith (R NJ) (55 Cosponsors).

Introduced: March 7, 1985.

House Committee: Merchant Marine and Fisheries.

Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill prohibits the cargo preference laws from applying to export activities of the Commodity Credit Corporation (CCC) or the Department of Agriculture under which: (1) stocks of agricultural commodities or the products thereof acquired by the CCC are made available to U.S. exporters, users, or foreign purchasers for the maintenance or expansion of export markets for U.S. agricultural commodities; (2) commercial credit guarantees are blended with direct interest-free credits from the CCC to reduce the interest rate on export sales of U.S. agricultural commodities; or (3) the CCC or the Department of Agriculture promotes the export of U.S. agricultural commodities on a commercial basis.

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### H.R. 1612 (99th Congress)

Official Title: A bill to amend the Commodity Credit Corporation Charter Act regarding the export of agricultural commodities, and for other purposes.

Sponsor: Glenn English (D OK) (51 Cosponsors).

Introduced: March 20, 1985.

House Committee: Agriculture
Foreign Affairs
Merchant Marine and Fisheries.

Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill amends the Commodity Credit Corporation Charter Act to exempt from certain cargo preference requirements activities of the Commodity Credit Corporation or the Department of Agriculture that promote the export of agricultural commodities.

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## H.R. 1760 (99th Congress)

Official Title: A bill to amend the Commodity Credit Corporation Act regarding the export of agricultural commodities, and for other purposes

Sponsor: Doug Bereuter (R NE) (26 Cosponsors).

Introduced: March 27, 1985.

House Committees: Agriculture
Foreign Affairs
Merchant Marine and Fisheries.

Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill amends the Commodity Credit Corporation Charter Act to exempt from the cargo preference requirements activities of the Commodity Credit Corporation or the Department of Agriculture that promote the export of agricultural commodities.

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## H.R. 1965 (99th Congress)

Official Title: A bill to provide market expansion and income protection for farmers, assure consumers an abundance of food and fiber at reasonable prices, and for other purposes.

Brief Title: Agriculture Act of 1985.

Sponsor: Bill Emerson (R MO) (104 Cosponsors).

Introduced: April 3, 1985.

House Committees: Agriculture
Foreign Affairs
Merchant Marine and Fisheries.

Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

Title XI of this bill (Agriculture Export and P.L. 480 - Subtitle A: Export Provisions) amends the Food for Peace Act of 1966 to extend authority through 1989 for the Agricultural Export Credit Revolving Fund. It exempts export sales financed or guaranteed by the Commodity Credit Corporation (CCC) from cargo preference laws. It also amends the Agriculture and Food Act of 1981 to exempt the special standby export subsidy program from cargo preference laws.

The Secretary is directed to use bonus commodities from the CCC to offset the adverse effects of competing countries' subsidies and currency exchanges. This bill also exempts such exports from cargo preference laws.

Subtitle B: This part amends the Agriculture Trade Development and Assistance Act of 1954 (P.L. 480) to increase minimum export tonnage levels. It also exempts such exports from cargo preference laws.

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## H.R. 2357 (99th Congress)

Official Title: A bill exempting agricultural commodity exports from the effect of certain cargo preference laws.

Sponsor: Hank Brown (R CO) (7 Cosponsors).

Introduced: May 6, 1985.

House Committee: Merchant Marine and Fisheries.

Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill provides that no export of agricultural commodities shall be subject to the cargo preference requirements of the Merchant Marine Act of 1936 or the Joint Resolution requiring agricultural or other products to be shipped in U.S. vessels.

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## H.R. 2407 (99th Congress)

Official Title: A bill to assist in expanding and increasing foreign markets for agricultural commodities and the products of such commodities produced in the United States, and for other purposes.

Brief Title: Agricultural Fair Trade Act of 1985.

Sponsor: William M. Thomas (R CA) (104 Cosponsors).

Introduced: May 7, 1985.

House Committees: Agriculture
Foreign Affairs
Merchant Marine and Fisheries
Ways and Means.

Fate: Currently pending in Subcommittee on Trade.

**Digest**

This bill exempts Department of Agriculture blended credit agricultural sales from cargo preference requirements.

It also amends the Agricultural Act of 1949 to authorize: (1) the President to enter into agreements with developing nations to provide agricultural commodities and products to promote free enterprise agricultural policies; and (2) the Secretary to provide CCC stocks or CCC-purchased commodities for such purposes. The bill exempts such commodities from cargo preference laws and requires the President to report annually to the appropriate Congressional Commit-

tees. It authorizes such programs for FY 1986 through FY 1989.

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### H.R. 2538 (99th Congress)

Official Title: A bill exempting the export of certain agricultural commodities from the cargo preference provision of the Merchant Marine Act, 1936.
Sponsor: Jim Leach (R IA) (1 Cosponsor).
Introduced: May 16, 1985.
House Committees: Agriculture
Foreign Affairs
Merchant Marine and Fisheries.
Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill exempts the export of certain agricultural commodities from the cargo preference provisions of the Merchant Marine Act of 1936.

## 5. Improve Military Readiness of Private Vessels

### H.R. 2144 (99th Congress)

Official Title: A bill to establish a Ready Reserve-Sealift Enchancement Revolving fund.
Sponsor: John R. McKernan (R ME).
Introduced: April 18, 1985.
House Committees: Armed Services
Merchant Marine and Fisheries.
Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill establishes within the Treasury the Ready Reserve-Sealift Enhancement Revolving Fund (Fund) and authorizes appropriations of such funds as may be necessary to capitalize such Fund.

The bill provides that the Secretary of the Navy shall administer such Fund and requires that amounts in such Fund shall be used only for the construction in private shipyards in the United States of merchant vessels capable of serving as naval and military auxiliaries in time of war or national emergency.

In addition, it authorizes the Secretary to award contracts to private shipyards for the construction of merchant vessels capable of serving as naval and military auxiliaries. It also authorizes the Secretary to charter or sell any merchant ship constructed under this Act to citizens of the United States for operation in foreign commerce.

## 6. Operating Differential Subsidy

### Public Law 98-556 (98th Congress)

Official Title: Maritime Appropriation Authorization Act for Fiscal Year 1985.
Sponsors: Mario Biaggi (D NY) (H.R. 4706) Ted Stevens (R AK) (S. 2499).
Introduced: February 1, 1984, in the House
March 29, 1984, in the Senate.
House Committee: Merchant Marine and Fisheries.
Senate Committee: Commerce, Science, and Transportation.
Fate: Signed into law October 30, 1984.

**Digest**

This bill authorized the appropriation for fiscal year 1985 for the Department of Transportation to continue the following maritime programs:

1. Operating Differential Subsidy: $377.750 million was authorized to support the operation of 142 ships (124 liner vessels operated by 8 companies and 18 bulk carriers operated by 9 companies) either engaged in the worldwide trade or the special bulk commodities trade.

2. Research and Development: $10 million was authorized to develop information and technology that would hopefully result in lower shipbuilding and operating costs, which in turn would lead to less government subsidization for both ship construction and operation.

3. Operations and Training: $80.807 million was authorized for: the Federal Merchant Marine Academy ($21.940 million); additional Federal training programs ($1.410 million); financial assistance to State maritime academies ($8.200 million); conversion of a ship to a training vessel ($5 million); training vessel fuel oil assistance ($3 million); national security support programs ($9.111 million); and other general operating expenses ($29.146 million).

4. Federal Maritime Commission: $12,292 million was authorized for the operations of the Federal Maritime Commission for fiscal year 1985.

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### S. 1037 (98th Congress)

Official Title: Maritime Appropriation Authorization Act for Fiscal Years 1984 and 1985.
Sponsor: Ted Stevens (R AK) (by request).
Introduced: April 12, 1983.
Senate Committee: Commerce, Science, and Transportation.
House Committee: Merchant Marine and Fisheries.
Fate: Passed Senate on April 28, 1983. Passed House, as amended, on November 4, 1983. Indefinitely postponed by Senate on August 6, 1984.

**Digest**

This bill would authorize fiscal year 1984 appropriations for the Department of Transportation for: (1) Operating Differential Subsidy ($401.294 million); (2) research and development ($11.50 million); (3) operations and training ($71.013 million).

The bill also would set forth conditions under which vessels constructed under a Construction Differential Subsidy, that are limited to foreign trade, could enter into the coastwise domestic trade.

**Positions on Bill**

Opposed by the Administration.

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## S. 1038 (98th Congress)

Official Title: Merchant Marine Act of 1983.
Sponsor: Ted Stevens (R AK) (by request).
Introduced: April 12, 1983.
Senate Committee: Commerce, Science, and Transportation.
Fate: Died in Subcommittee on Merchant Marine.

**Digest**

This bill would amend the Merchant Marine Act of 1936 to allow an operator receiving or applying for an Operating Differential Subsidy to construct or repair its vessel in a foreign shipyard. Only ships over 5,000 deadweight tons, suitable for use in times of national emergency or war, could be so constructed or repaired. Vessel age criteria and period of documentation would be set forth. A ship would have to meet these criteria before being deemed a privately owned U.S.-flag vessel for the purpose of transporting government cargos.

The bill would also set forth "controlling interest" and "voting power" requirements of corporations, partnerships, or associations in order to be deemed a "citizen of the United States."

The bill would authorize the use of Capital Construction Funds to be used to construct or repair a vessel, for U.S.-flag documentation, in foreign shipyards.

The bill would repeal provisions of the Tariff Act of 1930 requiring a 50-percent ad valorem duty on the costs of vessel repairs done in foreign shipyards. The bill also would amend the Merchant Marine Act of 1936 to repeal the provisions that an operator receiving an Operating Differential Subsidy would have to perform all repairs except for emergency repairs, in U.S. shipyards, provided that an operator would receive a subsidy only for repairs performed in U.S. shipyards.

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## H.R. 3156 (98th Congress)

Official Title: A bill to amend the Merchant Marine Act of 1936 and for other purposes.
Sponsor: Edwin B. Forsythe (R NJ) (by request).
Introduced: May 26, 1983.
House Committees: Merchant Marine and Fisheries Ways and Means.
Fate: Died in Subcommittee.

**Digest**

*Title I*—This part would amend the Merchant Marine Act of 1936 to allow the Secretary of Transportation to authorize an operator receiving or applying for an Operating Differential Subsidy to construct or reconstruct vessels in a foreign shipyard or to acquire them outside the United States. Such authorization would be restricted to vessels over 5,000 deadweight tons which are suitable for use for national defense or military purposes in time of war or national emergency. This bill would eliminate preconditions for such authorization.

The bill would set forth criteria of age, period of documentation, and necessity to national defense according to which vessels constructed outside the United States would be deemed privately owned U.S.-flag commercial vessels for the purpose of transporting government cargos.

The bill would revise the definition of "citizen of the United States" to include certain citizenship requirements and would increase the authorized foreign investment in certain corporations, partnerships, or associations engaged in U.S.-flag shipping.

*Title II*—This part would allow eligible foreign-built vessels to enter into an agreement with the Secretary to establish a Capital Construction Fund.

The bill would amend the Tariff Act of 1930 to repeal provisions requiring a 50-percent ad valorem duty on the cost of vessel repairs made abroad.

The bill also would amend the Merchant Marine Act of 1936 to remove the exception for emergencies in the requirement that operators receiving an Operating Differential Subsidy for repairs make such repairs within the United States or Puerto Rico.

**Positions on Bill**

Supported by the Administration. Opposed by the AFL-CIO.

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## S. 679 (99th Congress)

Official Title: A bill to authorize the appropriation of funds for certain maritime programs.
Brief Title: Maritime Appropriation Authorization Act for Fiscal Year 1986.
Sponsor: Ted Stevens (R AK) (1 Cosponsor).
Introduced: March 18, 1985.
Senate Committee: Commerce, Science, and Transportation.
Fate: Passed Senate on June 5, 1985.

**Digest**

This bill authorizes appropriations for FY 1986 for the Department of Transportation for the following maritime items: (1) Operating Differential Subsidy (ODS)

($335,084,000); (2) research and development activities ($9,900,000); and (3) operations and training activities ($71,967,000), including maritime education and training expenses and national security support capabilities. It also authorizes appropriations for FY 1986 for the Federal Maritime Commission ($11,940,000).

It amends the judicial code to confer exclusive jurisdiction upon the Court of Appeals to enjoin, set aside, suspend, or determine the validity of all final orders of the Federal Maritime Commission entered under the Federal shipping laws.

**Positions**

The Administration contemplates an appropriation of only $299,500,000 for ODS, which is $35,584,000 less than the bill. The Administration's amount for research and development is the same as the bill. The Administration requested $67,812,000 for operations and training but raised it to the bill level to include fuel oil for State academy training vessels and restoration of a proposed 5-percent reduction in pay for all Federal employees.

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## S. 1481 (99th Congress)

Official Title: A bill to amend the Merchant Marine Act, 1936, to authorize the foreign acquisition of subsidized United States-flag vessels.

Sponsor: Ted Stevens (R AK).

Introduced: July 23, 1985.

Senate Committee: Commerce, Science, and Transportation.

Fate: Currently pending in Senate Committee on Commerce.

**Digest**

This bill amends the Merchant Marine Act of 1936 to allow the Secretary of Transportation to authorize a vessel operator receiving or applying for an Operating Differential Subsidy to construct or reconstruct its vessels in a foreign shipyard, or acquire such vessels outside the United States, if (1) the vessel is over 5,000 deadweight tons; and (2) the vessel is suitable for use by the United States for national defense or otherwise useful purposes in time of war or national emergency.

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## H.R. 1157 (99th Congress)

Official Title: A bill to authorize appropriations for fiscal year 1986 for certain maritime programs of the Department of Transportation and the Federal Maritime Commission.

Sponsor: Mario Biaggi (D NY) (2 Cosponsors).

Introduced: February 20, 1985.

House Committee: Merchant Marine and Fisheries.

Senate Committee: Commerce, Science, and Transportation.

Fate: Passed House, on May 14, 1985. Referred to Senate Committee on Commerce on May 15, 1985.

**Digest**

The bill authorizes appropriations for FY 1986 for the Maritime Administration for: (1) payment of obligations incurred for Operating Differential Subsidy ($335,084,000), (2) research and development activities ($9,900,000); and (3) operations and training activities ($71,967,000).

It authorizes appropriations for the Federal Maritime Commission (FMC) for FY 1986 ($11,940,000).

It prohibits funds authorized by this Act from exceeding amounts appropriated for the Maritime Administration and the Federal Maritime Commission for FY 1985.

**Analysis**

This bill authorizes the appropriation of a total of $416,951,000 for various Maritime Administration (Department of Transportation) programs for fiscal year 1986. The bill differs from the Administration's request of $368,712,000 in several ways. The Administration plans to seek changes in the Operating Differential Subsidy program by regulation or legislation. The projected savings from these proposed changes is $35,584,000. The difference also represents the Administration's desire to defer and use $8,500,000 that was appropriated to replace a State training vessel, the addition of $3,000,000 by the Committee for fuel oil for State training vessels, and the Administration's estimate of a possible savings of $1,155,000 in contemplation of a legislative reduction in salary scales for civil service personnel.

Section 2 of the bill contains authorization authority for $11,940,000 for the Federal Maritime Commission for fiscal year 1986.

This authorization for the Maritime Administration represents an overall decrease of $48,166,000 (or about 10 percent) below the amount appropriated for fiscal year 1985. The FMC authorization represents an overall decrease of $352,000 (for about 3 percent).

**Positions**

The Office of Management and Budget said there is no objection from the standpoint of the Administration's program to this legislation and its enactment would be in accordance with the President's program.

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## H.R. 3141 (99th Congress)

Official Title: A bill to amend the Merchant Marine Act, 1936, to authorize the foreign acquisition of subsidized U.S.-flag vessels.

Sponsor: Norman F. Lent (R NY) (2 Cosponsors).
Introduced: July 31, 1985.
House Committee: Merchant Marine and Fisheries.
Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill amends the Merchant Marine Act of 1936 to allow the Secretary of Transportation to authorize a vessel operator receiving or applying for an Operating Differential Subsidy to construct or reconstruct its vessels in a foreign shipyard, or acquire such vessels outside the United States, if (1) the vessel were over 5,000 deadweight tons; and (2) the vessel were suitable for use by the United States for national defense or otherwise useful purposes in time of war or national emergency.

## 7. Capital Construction Fund

### S. 1522 (99th Congress)

Official Title: A bill to amend section 607 of the Merchant Marine Act, 1936, to ensure consistent use of funds made available for capital construction of vessels, and for other purposes.
Sponsor: Ted Stevens (R AK).
Introduced: July 29, 1985.
Senate Committee: Read twice and placed on Senate Calendar.
Fate: Pending Senate action.

**Digest**

This bill amends the Merchant Marine Act of 1936 to provide for the termination of a Capital Construction Fund (CCF) agreement entered into between the Secretary of Commerce and a corporation owning or leasing vessels eligible for such fund if the Secretary determines, after a hearing, that a hostile change in control of such corporation is inconsistent with the purposes of the agreement.

The bill directs the Secretary to terminate a CCF agreement when a nonqualified withdrawal is made from such Fund within 3 years after a hostile change in control, if the Secretary determines that the withdrawal is inconsistent with the purposes of such agreement.

Penalties are imposed for termination of such agreements. The Secretary of Commerce is directed to determine whether a hostile change in control of a corporation has occurred for purposes of this Act.

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### H.R. 2893 (99th Congress)

Official Title: A bill to amend Section 607 of the Merchant Marine Act, 1936, dealing with the captial construction fund, and for other purposes.
Sponsor: Mario Biaggi (D NY) (1 cosponsor).
Introduced: June 27, 1985.
House Committee: Merchant Marine and Fisheries.
Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill amends the definition of "eligible vessel" in Section 607 of the Merchant Marine Act of 1936. The present requirements that an eligible vessel must be (1) built in the United States; (2) documented under the laws of the United States; *and* (3) operated in the foreign or domestic commerce, or the fisheries of the United States, would be deleted. Instead an "eligible vessel" would need only be (1) documented under the laws of the United States (which does not require being built in the United States), *or* (2) owned by a U.S.-controlled foreign corporation.

This bill also amends the definition of "qualified vessel" by adding that a person maintaining a CCF fund may operate the vessel, in addition to the present criteria, in support of exploration, exploitation or production of offshore mineral or energy resources.

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### H.R. 3264 (99th Congress)

Official Title: A bill to amend section 607 of the Merchant Marine Act, 1936, to ensure consistent use of funds made available for capital construction of vessels, and for other purposes.
Sponsor: Mario Biaggi (D NY) (2 Cosponsors).
Introduced: September 11, 1985.
House Committee: Merchant Marine and Fisheries.
Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill amends the Merchant Marine Act of 1936, to provide for the termination of a Capital Construction Fund (CCF) agreement entered into between the Secretary of Commerce and a corporation owning or leasing vessels eligible for such fund if the Secretary determines, after a hearing, that a hostile change in control of such corporation is inconsistent with the purposes of the agreement.

The bill directs the Secretary to terminate a CCF agreement when a nonqualified withdrawal is made from such Fund within 3 years after a hostile change in control, if the Secretary determines that the withdrawal is inconsistent with the purposes of such agreement.

Penalties are imposed for termination of such agreements. The Secretary of Commerce is directed to determine whether a hostile change in control of a corporation has occurred for purposes of this Act.

## 8. Other Ship Operator Supports

### Public Law 98-237 (98th Congress)

Official Title: Shipping Act of 1984; To improve the international ocean commerce transportation system of the United States.
Sponsors: Slade Gorton (R WA) (5 Cosponsors) (S.47) Mario Biaggi (D NY) (H.R. 1878).
Introduced: January 26, 1983.
Senate Committee: Commerce, Science, and Transportation.
Fate: Signed into law on March 20, 1984.

**Digest**

This Act is applicable to agreements among ocean common carriers to: (1) regulate transportation rates and other conditions of service; (2) apportion traffic revenues, net losses or profits; (3) allot ports or regulate the number and character of sailings between ports; (4) regulate the volume or character of cargo or passenter traffic; (5) engage in exclusive, preferential, or cooperative working arrangements among themselves or marine terminal operators or non-vessel-operating common carriers; (6) regulate, or prevent competition in international ocean transportation; and (7) regulate the use of service contracts. This Act is also applicable to agreements among marine terminal operators and ocean common carriers to: (1) regulate rates or other conditions of service; and (2) engage in exclusive, preferential, or cooperative working arrangements. A copy of every applicable agreement is required to be filed with the Federal Maritime Commission.

The Act sets forth requirements for contents of conference agreements, inter-conference agreements, and assessment agreements, and describes criteria by which the Commission shall suspend, cancel, or modify such agreements. Certain agreements, contracts and activities are exempted from the antitrust laws.

The Act directs ocean common carriers and conferences to file with the Commission, and keep open to public inspection, tariffs showing all rates between all points on each carrier's routes. It also sets forth procedures for rate changes and refunds.

The Act prohibits a foreign state-owned vessel from maintaining rates in its tariffs that are below a level that is "just and reasonable," and describes standards against which such rates shall be disapproved.

The Act describes procedures for the investigation and adjudication of complaints alleging a violation of this Act and sets forth civil penalties for violations. It declares that orders of the Federal Maritime Commission relating to any violation of this Act shall remain in effect for the period of time specified unless suspended, modified, or set aside by the Commission or court of competent jurisdiction.

The Act permits the Commission to exempt any specific activity of class of agreements from provisions of this Act.

The Act directs the Commission, for a period of 5 years following the enactment of this Act, to collect and analyze information concerning the impact of this Act upon the international ocean shipping industry.

The Act establishes the Advisory Commission on Conferences in Ocean Shipping, effective 5½ years after enactment of this Act, to conduct a comprehensive study of conferences in ocean shipping. It terminates the Advisory Commission 30 days after its final report.

## 9. Allowing Foreign-Built Vessels in Coastwide Trade

### Public Law 98-151 (98th Congress)

Official Title: Section 134 of the Continuing Resolution of 1984.
Sponsor: Pete Wilson (R CA).
Introduced: November 9, 1983.
House Committee: Appropriations.
Fate: Enacted into law November 14, 1983.

**Digest**

The Wilson (CA) Amendment (Section 134) authorized the Secretary of Transportation to permit the acquisition of four existing foreign-built vessels by a "subsidized United States-flag liner company" for operation under the U.S. flag and required the conversion of two of these four vessels in U.S. shipyards. The Secretary also was authorized to permit the acquisition of two foreign-built ships by another "subsidized United States-flag liner company," provided that one of such ships was converted in a U.S. shipyard.

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### Public Law 98-563 (98th Congress)

Official Title: An Act to permit the transportation of passengers between Puerto Rico and other United States ports on foreign-flag vessels when United States flag service for such transportation is not available.
Sponsor: Baltasar Corrada (D Puerto Rico) (H.R. 89).
Introduced: January 3, 1983.
House Committee: Merchant Marine and Fisheries.
Senate Committee: Commerce, Science, and Transportation.
Passed into law: October 30, 1984.

**Digest**

This Act authorizes the transportation of passengers on passenger vessels not qualified to engage in the

coastwise trade between Puerto Rico and U.S. ports, if no vessel qualified to engage in the U.S. coastwise trade offers such service. If, however, a coastwise-trade-qualified vessel obtains a certificate of financial responsibility, and is otherwise qualified, the Secretary of Transportation must notify vessels operating under the authority of this law, which would then have 270 days from the time of notification by the Secretary of Transportation to terminate their service. A 90-day extension of authority may be obtained if a delay occurs in the implementation of service of the new vessel.

A preference for U.S.-flag subsidized or U.S.-flag, foreign-built passenger vessels over foreign-flag vessels is established for ships trying to qualify under this Act.

**Positions on the Act**

Proponents noted that since 1953 no coastwise-qualified passenger service has existed, and thus the bill would not harm any of this fleet. The Puerto Rican Trust Company estimated that 80,000 more tourists would visit Puerto Rico each year, which would add $34 million to the local economy and would create 4,000 new jobs.

Opponents argued that the cabotage laws were designed to protect and promote the U.S.-flag Merchant Marine, and should be waived only for national defense or other compelling reasons. Further, instead of waiving Jones Act requirements for Puerto Rico passenger vessels, the waiver for the Virgin Island passenger vessels should be repealed.

Opposed by the U.S. maritime industry.

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## S. 1197 (98th Congress)

Official Title: A bill to admit certain passenger vessels to the coastwise trade.

Sponsor: Ted Stevens (R AK).

Introduced: May 3, 1983.

Senate Committee: Commerce, Science, and Transportation.

Fate: Died in Committee.

**Digest**

This bill would document two foreign-built vessels as U.S.-flag vessels with coastwise privileges in the cruise ship industry. The bill would also waive certain restrictions of the Merchant Marine Act of 1920 and the Vessel Documentation Act.

**Positions on Bill**

Opposed by Shipbuilders Council of America.

Supported by New York Port Authority, Transportation Institute.

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## H.R. 2883 (98th Congress)

Official Title: A bill to admit certain passenger vessels to the coastwise trade.

Sponsor: E. Clay Shaw (R FL).

Introduced: May 3, 1983.

House Committee: Merchant Marine and Fisheries.

Fate: Returned to Committee from House floor.

**Digest**

This bill would admit the *CUNARD PRINCESS* and *CUNARD COUNTESS*, foreign-built and flagged vessels, to the Jones Act Fleet, with the privilege of operating in the U.S. coastwise trade, with the conditions that all repair work be performed in U.S. yards, and that their carriage be limited to passengers and their baggage.

**Positions on Bill**

Opposed by the National Maritime Union.

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## H.R. 4333 (98th Congress)

Official Title: A bill to admit certain passenger vessels to the coastwise trade.

Sponsor: E. Clay Shaw (R FL).

Introduced: November 8, 1983.

House Committee: Merchant Marine and Fisheries.

Fate: Passed by Committee, entered as an amendment to H.R. 5167. House passed H.R. 5167 on May 31, 1984, but the amendment of H.R. 4333 died in House-Senate Conference.

**Digest**

This bill would admit the *CUNARD PRINCESS* and *CUNARD COUNTESS*, foreign-built and flagged vessels, to the Jones Act Fleet, with the privilege of operating in the U.S. coastwise trade, with the conditions that all repair work was done in U.S. yards, and that their carriage was limited to passengers and their baggage.

**Positions on Bill**

Opposed by the National Maritime Union.

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## S. 1461 (99th Congress)

Official Title: A bill to direct the Secretary of the department in which the United States Coast Guard is operating to cause certain vessels to be documented as vessels of the United States so as to be entitled to engage in the coastwise trade, and for other purposes.

Sponsor: Daniel K. Inouye (D HI) (1 Cosponsor).

Introduced: July 18, 1985.

Senate Committee: Commerce, Science, and Transportation.

Fate: Hearings held in Subcommittee on Merchant Marine on September 12, 1985.

**Digest**

This bill directs the Secretary of the department in which the Coast Guard is operating to document as a U.S. vessel entitled to engage in the coastwise trade any passenger vessel, if (1) all major structural components of such vessel were fabricated and assembled in the United States, and its propulsion and auxiliary machinery systems were installed and tested in the United States; (2) such vessel were in compliance with other requirements for coastwise trade vessels; (3) such vessel were owned by a U.S. citizen (4) the for-hire carriage trade were limited to passengers and their property; and (5) such vessel's owner were agreeable to contracting with the United States for inclusion of enhanced military features.

This Act is applicable to any passenger vessel for which a building contract has been executed within 2 years of enactment.

*Section 2*—The steamship vessel *LIBERTE* will lose the right to engage in coastwise trade if it operates in other than the intra-Hawaiian Islands trade, and any other vessel will lose the right to engage in coastwise trade if in its first 2 years of operation it operates in the intra-Hawaiian Islands trade.

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### H.R. 3262 (99th Congress)

Official Title: A bill entitled the "Passenger Ship Authorization Act."

Sponsor: Helen Delich Bentley (R MD).

Introduced: September 11, 1985.

House Committee: Merchant Marine and Fisheries.

Fate: Currently pending in Subcommitee on Merchant Marine.

**Digest**

This bill directs the Secretary of the department in which the Coast Guard is operating to document as a U.S. vessel entitled to engage in the coastwise trade any passenger vessel, if: (1) all major structural components of such vessel were fabricated and assembled in the United States, and its propulsion and auxiliary machinery systems were installed and tested in the United States; (2) such vessel were in compliance with other requirements for coastwise trade vessels; (3) such vessel were owned by a U.S. citizen; (4) the for-hire carriage trade were limited to passengers and their property; and (5) such vessel's owners were agreeable to contracting with the United States for inclusion of enhanced military features.

This Act is applicable to any passenger vessel for which a building contract has been executed within 2 years of enactment.

## Other Related Ship/Shipbuilding Bills

### War Risk
### Public Law 99-59 (99th Congress)

Official Title: An Act to extend the provisions of Title XII of the Merchant Marine Act, 1936, relating to war risk insurance.

Sponsors: Ted Stevens (R AK) (S.413).

Introduced: February 6, 1985.

Senate Committee: Commerce, Science, and Transportation.

Fate: Enacted into law on July 3, 1985.

**Digest**

This Act amends the Merchant Marine Act of 1936 to extend from September 30, 1984, to June 30, 1990, the authority of the Secretary of Commerce to provide war risk insurance.

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### Export of Oil
### H.R. 1197 (98th Congress)

Official Title: A bill to amend the Export Administration Act of 1979 to extend the provisions relating to the export of domestically produced crude oil.

Sponsor: Stewart B. McKinney (R CT) (237 Cosponsors).

Introduced: February 2, 1983.

House Committee: Foreign Affairs.

Fate: Died in Subcommittee on International Economic Policy and Trade.

**Digest**

This bill would amend the Export Administration Act to allow the shipping of domestically produced crude oil to foreign countries without the need for a Presidential recommendation supported by a report to the Congress on specified findings.

**Positions on Bill**

Supported by the maritime industry.

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### Maritime Agreements Act of 1985
### S. 189 (99th Congress)

Official Title: A bill to provide for consideration of certain policy objectives in order to promote the development maintenance of an efficient ocean transportation system, and for other purposes.

Brief Title: Maritime Agreements Act of 1985.

Sponsor: Daniel K. Inouye (D HI).

Introduced: January 3, 1985.

Senate Committee: Commerce, Science, and Transportation.
Fate: Currently pending in Senate Committee on Commerce, Science and Transportation.

**Digest**

This bill amends the Shipping Act of 1916 to prohibit the United States from entering into intergovernmental maritime agreements that provide for or limit access to liner cargo in foreign commerce, unless participation in such trade is open at all times to U.S.-flag carriers and reciprocal carriers (as defined), and other specified conditions are satisfied.

The Secretary of Transportation is directed in this bill to establish a Maritime Industries Advisory Committee to advise on the negotiation and implementation of such agreements. This Committee must submit a report annually to the Secretary containing its recommendations on such agreements.

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## Bennett Commission
## Public Law 98-525 (98th Congress)

Official Title: Department of Defense Authorization Act of 1985; a bill to establish a commission to study defense-related aspects of the United States Merchant Marine.
Sponsors: Charles E. Bennett (D FL) (H.R. 3289); John W. Warner (R VA) (S.2161).
Introduced: June 14, 1983.
House Committees: Armed Services
Merchant Marine and Fisheries.
Senate Committee: Governmental Affairs.
Fate: Passed into law October 19, 1984.

**Digest**

This Act, in part (Title XV, Part D), established the Commission on Merchant Marine and Defense to evaluate the capability of the U.S. Merchant Marine to provide transportation of cargo and personnel for national defense purposes in time of war or national emergency and the adequacy of the shipbuilding mobilization base in the United States. This act authorizes the Secretary of the Navy and the Administrator of the Maritime Administration to detail personnel to such Commission. The Commission is to report its conclusions and recommendations to the President and Congress by the end of FY 1985 and FY 1986 on the best manner to foster and maintain a U.S. Merchant Marine capable of meeting national security requirements. The Commission will terminate 90 days after it submits its report.

**Positions on Act**

Supported by the AFL/CIO.

Opposed by the Department of Defense, because the Department was conducting two studies of defense maritime requirements and believed consideration of the bill should be postponed until the studies were completed.

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## Diversion
## H.R. 1151 (98th Congress)

Official Title: A bill to provide for jurisdiction over common carriers by water engaging in foreign commerce to and from the United States utilizing ports in nations contiguous to the United States.
Sponsor: Mario Biaggi (D NY) (8 Cosponsors).
Introduced: February 17, 1983.
House Committee: Merchant Marine and Fisheries.
Fate: Lost on House floor.

**Digest**

This bill would make certain common carriers by water in foreign commerce subject to the tariff-filing requirements of the Shipping Act of 1984 and to the jurisdiction of the Federal Maritime Commission (FMC). The carriers that would be affected were those that engage in the ocean transport of property originating in or destined for a U.S. point by way of a port in Canada or Mexico if the carrier advertises or solicits within the United States and transports the property between the United States and a port in Canada or Mexico.

Canadian diversion is a common practice by foreign-flag carriers that solicit U.S. cargo, transport it by rail or truck to Canadian ports, and ship it on their vessels to foreign ports. The diversion occurs in the case of imports as well. The result of the bill would be to put carriers that move property out of the United States to Canadian or Mexican ports in the same position for purposes of filing tariffs as carriers that move property by way of the U.S. ports.

The bill also would prohibit these carriers from engaging in certain prohibited acts such as charging or receiving greater, less, or different compensation than the rates shown in the tariff; rebating; extending a privilege or consession except in accordance with the tariff; false billing, deferred rebates; and charging a rate unjustly discriminatory between shippers.

The bill would not require an ocean common carrier to reveal any information with respect to inland transportation. However, this provision is not intended to prevent the disclosure of other elements of an ocean carrier's costs, including its profits, even though such disclosure could indirectly reveal undifferentiated information about the inland portion of the total movement.

## Diversion
## S. 188 (99th Congress)

Official Title: A bill to amend the Shipping Act, 1916, to provide for jurisdiction over common carriers by water engaging in foreign commerce to and from the United States utilizing ports in nations contiguous to the United States.

Sponsor: Daniel K. Inouye (D HI).

Introduced: January 3, 1985.

Senate Committee: Commerce, Science, and Transportation.

Fate: Pending in Senate Committee on Commerce, Science and Transportation.

**Digest**

This bill amends the Shipping Act of 1916 to redefine the term "common carrier by water in foreign commerce" to inlcude those engaged as common carriers in specified ocean transportation of property who: (1) advertise, solicit, or arrange, within the United States, for such transportation; and (2) transport such property between a point within the United States and a port in a nation contiguous to the Unitd States.

Common carriers are directed to file their tariffs with the Federal Maritime Commission within 90 days of enactment of this Act.

The bill declares that nothing in the Act shall be construed to: (1) require such common carriers to reveal, in tariffs filed with the Commission, the portion of such tariffs attributable to inland transportation; (2) require such common carriers to reveal any information with regard to such inland transportation; or (3) extend to the Commission any jurisdiction over or authority to regulate rail carriers.

## Wrecked Vessels
## H.R. 5458 (98th Congress)

Official Title: A bill to repeal the Wrecked Vessel Statute.

Sponsor: Walter B. Jones (D NC) (1 Cosponsor).

Introduced: April 12, 1984.

House Committee: Merchant Marine and Fisheries.

Fate: Died in the Subcommittee on Merchant Marine.

**Digest**

The bill would repeal the Wrecked Vessel Statute, which provides that a foreign-built vessel wrecked in the United States may be given a U.S. registry if: (1) the wreck was purchased by U.S. citizens; (2) was repaired in a U.S. shipyard; and (3) the cost of repairs was three times the appraised salved value of the vessel.

## Wrecked Vessels
## H.R. 25 (99th Congress)

Official Title: A bill entitled the "Abandoned Shipwreck Act of 1985."

Sponsor: Charles E. Bennett (D FL) (8 Cosponsors).

Introduced: January 3, 1985.

House Committee: Interior and Insular Affiars
Merchant Marine and Fisheries.

Fate: Currently pending in Subcommittee on Oceanography.

**Digest**

This bill provides that the United States asserts title to any abandoned shipwreck that is: (1) substantially buried in submerged lands of a State; (2) in a coralline formations protected by a State on its submerged lands; or (3) on submerged lands of a State when such shipwreck is included or eligible for inclusion on the National Register of Historic Places, and the public is given adequate notice of the location of the shipwreck. The bill declares that any title to abandoned shipwrecks asserted under such conditions is transferred to the State in or on whose submerged lands the shipwreck is located.

The bill states that any abandoned shipwreck in or on the public lands of the United States (except the Outer Continental Shelf) is the property of the United States.

The law of salvage does not apply to abandoned shipwrecks referred to in this bill. This bill does not change U.S. laws relating to shipwrecks nor shall this bill affect any suit filed before the enactment of this Act.

This bill directs the Advisory Council on Historic Preservation to publish, within 6 months after the enactment of this Act, advisory guidelines for the protection of shipwrecks and properties to assist States and the U.S. Government to develop legislation and regulations to carryout their responsibilities to allow for:

(1) recreational exploration of shipwreck sites, and
(2) private sector recovery of shipwrecks, which is not injurious to the shipwreck on the environment surrounding the site.

## Amend Subtitle II of Title 46
## Public Law 99-36 (99th Congress)

Official Title: An Act to amend Subtitle II of Title 46, United States Code, "Shipping," making technical and conforming changes, and for other purposes.

Sponsor: Ted Stevens (R AK).

Introduced: March 6, 1985.

Senate Committee: Commerce, Science, and Transportation.
Fate: Enacted into law on May 15, 1985.

**Digest**

This Act exempts vessels engaged in coastwise commerce from the requirement that the master (or owner) of such vessels pay a seaman 2 days' wages for each day that payment of wages is delayed without sufficient cause and subjects fishing industry vessels that service remote Alaskan communities to certain safety requirements imposed upon flammable or combustible liquid bulk cargo.

This Act also makes technical amendments to a variety of Federal shipping cargos.

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## Limitation of Liability for Maritime Claims H.R. 277 (99th Congress)

Official Title: A bill to revise the laws pertaining to limitation of liability for maritime claims, and for other purposes.
Brief Title: Limitation of Liability Act of 1985.
Sponsor: Mario Biaggi (D NY) (1 Cosponsor).
Introduced: January 3, 1985.
House Committee: Merchant Marine and Fisheries.
Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill entitles shipowners and salvors (persons who render services in direct connection with salvage operations) to limit liability for the following maritime claims: (1) claims for death or personal injury; (2) claims for loss or damage to property; and (3) claims for losses resulting from delay or infringement to rights. This act does not apply to claims: (1) for salvage; (2) for contribution of general average; (3) arising out of nuclear incidents; or (4) related to discharge of oil or hazardous substances from vessels.

The bill describes conduct which bars limitation (willful intent or recklessness) and the method for resolving counterclaims (respective claims are to be set off against each other and the net balance is subject to limitation). The bill establishes the limits of liability.

H.R. 277 authorizes persons seeking to limit liability to file or join a complaint for limitation of liability in the District Court of the United States which has jurisdiction. It sets forth the method and procedures for such persons to establish a fund for the payment of claims against them.

The bill repeals specified laws to conform to provisions of this Act.

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## Replacement Training Vessel Fund H.R. 2533 (99th Congress)

Official Title: A bill to amend the Maritime Education and Training Act of 1980.
Sponsor: Mario Biaggi (D NY) (5 Cosponsors).
Introduced: May 16, 1985.
House Committee: Merchant Marine and Fisheries.
Fate: Currently pending in Subcommittee on Merchant Marine.

**Digest**

This bill amends the Maritime Education and Training Act of 1980 to direct the Secretary of Transportation to maintain a Replacement Training Vessel fund that shall be used as a revolving fund for the building or acquisition of modern training vessels to replace, within 10 years from the date of enactment, existing training vessels furnished to State maritime academies. The Secretary shall credit to the fund the sum of $8,500,000 that was appropriated by P.L. 98-396 and any other monies that may be authorized and appropriated for this purpose.

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## Amending Section 901(b) S. 1482 (99th Congress)

Official Title: A bill to amend Section 901(b) of the Merchant Marine Act, 1936.
Sponsor: Ted Stevens (R AK).
Introduced: July 23, 1985.
Senate Committee: Commerce, Science, and Transportation.
Fate: Currently pending in Senate Committee on Commerce, Science, and Transportation.

**Digest**

This bill amends the Merchant Marine Act of 1936 to provide that the term "privately owned United States-flag commercial vessels" shall not include any vessel built outside the United States that is U.S.-flag registered subsequent to the date of enactment of this Act, unless the vessel is less than 5 years old, or is more than 5 but less than 10, and deemed to be particularly suitable for national defense or has been documented under U.S. laws for 3 years.

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Prepared by David C. Slade.

# APPENDIX 7
# Glossary of Acronyms

**CCF** ..... Capital Construction Fund
**CDS** ..... Construction Differential Subsidy
**CMMS** ..... Congressionally Mandated Study
**CRAF** ..... Civil Reserve Air Fleet
**CSIS** ..... [Georgetown] Center for Strategic and International Studies
**DOD** ..... Department of Defense
**dwt** ..... deadweight tons
**EUSC** ..... Effective U.S.-Control [Fleet]
**FDLS** ..... Fast Deployment Logistics Ships
**GRT** ..... Gross Registered Tons
**ICJ** ..... International Court of Justice
**IMCO** ..... Intergovernmental Maritime Consultative Organisation
**ISNAC** ..... Inactive Ships in Naval Custody
**LNG** ..... Liquified Propane Gas
**MSC** ..... Military Sealift Command
**LASH** ..... Lighter Aboard Ship
**NACOA** ..... National Advisory Committee on Oceans and Atmosphere
**NADES** ..... National Defense Shipyard Study
**NATO** ..... North Atlantic Treaty Organization
**NDF** ..... National Defense Features
**NTPF** ..... Near-Term Prepositioned Force
**ODS** ..... Operating Differential Subsidy
**POL** ..... Petroleum, Oil, and Lubricants
**RD** ..... Rapid Deployment Force
**RRF** ..... Ready Reserve Force
**SCN** ..... [Navy] Shipbuilding and Conversion
**SE** ..... Sealift Enhancement Features
**SMRP** ..... Stragetic Mobility Requirements and Program
**SRP** ..... Sealift Readiness Program
**SYMBA** ..... Shipyard Mobilization Base Study
**TACS*** ..... Auxiliary Crane Ship
**TAH*** ..... Auxiliary Hospital
**TAKR*** ..... Auxiliary Cargo-Rapid
**TAKX*** ..... Auxiliary Cargo-Special
**TAVB*** ..... Aviation Support
**ULCC** ..... Ultra Large Crude Carrier
**UNCTAD** ..... United Nations Conference on Trade and Development

* The ship type designators beginning with T are collectively known as the Navy's "T"-ship program; all are being constructed or converted in U.S. shipyards. The "T" designator derives from the time when the Military Sealift Command (MSC) was known as the Military Sea Transport Service (MSTS), and its vessels were all designated "T" ships for "transport."